

Winpower

User Manual

Table of Contents

Chapter 1 Winpower Introduction	4
1. Winpower profile	4
2. Winpower Structure	4
3. Winpower Application Range	5
4. Winpower Functions & Advantages	6
Chapter 2 Winpower Installation, Start & Uninstall	7
1. System Requirements	7
2. Platforms supported by Winpower include the following.....	7
3. Winpower Installation Steps	7
4. Start/Stop Winpower	13
5. Uninstall Winpower	15
Chapter 3 Winpower User Interface.....	19
1. "Winpower Manager" window.....	19
2. Menu and Dialog	23
1) Auto Search Device	23
2) "Administrator" Dialog	25
3) "Administrator Password Settings" Dialog.....	25
4) "Event log Viewer" Dialog	26
5) "Data log Viewer" Dialog	26
6) "Record Setting" Dialog.....	27
7) " Device Control Parameters" Dialog.....	31
8) "Event Action" Dialog	41
9) "Shutdown Settings" Dialog	41
10) "UPS Self-Test Immediately" Dialog.....	44
11) "UPS Test Manager" Dialog	44
12) "UPS On/Off Manager" Dialog.....	45
13) "Schedule Viewer" Dialog.....	46
14) "Broadcast Message Settings" Dialog.....	47
15) "Email Settings" Dialog	48
16) "SMS Setting" Dialog	50
17) "Pager Setting" Dialog	51
18) "Monitor Remote Device" Dialog	52
19) Bottom image.....	53
20) Temp	54
21) Date Format	54
22) Advance Settings.....	55
23) Language menu.....	56
24) "Communication Port Settings" Dialog	57
Chapter 4 How to do.....	58
1. How to realize the conversion of the appointed COM port?	58
2. How to realize broadcasting message in LAN.....	59

<i>3. How to realize the schedule of adding/Removing UPS self-test.....</i>	<i>62</i>
<i>4. How to realize the schedule of adding/Removing UPS on/off.....</i>	<i>65</i>
<i>5. How to realize the network shutdown function.....</i>	<i>69</i>
<i>6. How to realize Setting up shutdown parameter.....</i>	<i>70</i>
<i>7. How to realize the modification of Device control parameter</i>	<i>72</i>
<i>8. How to realize system administrator operation and password modifying realize.....</i>	<i>76</i>
<i>9. How to realize sending event message by email.....</i>	<i>77</i>
<i>10. How to realize sending event messages by mobile phone.....</i>	<i>78</i>
<i>11. How to realize sending event messages by pager.....</i>	<i>79</i>
<i>12. How to realize monitoring device remotely in LAN within the same network.....</i>	<i>81</i>
<i>13. How to realize remote control of any device in different network in LAN</i>	<i>84</i>
<i>14. How to realize the Remote Control of any one of the device in Internet.....</i>	<i>87</i>
Appendix A—Glossary Explanation	91
Appendix B---Winpower Event Table	92
Frequently Asked Questions	93

Chapter 1 Winpower Introduction

1. Winpower profile

Winpower is a device monitoring software, which supports individual computer and computers connected with network (including LAN & WAN).

It is used to monitor the intelligent device to protect computer systems from being shut down abnormally when power fails. User can monitor and configure the device on any computer in the same LAN. With the software, a device can provide security protection for more than one computer at the same time, including shutting down system in security, saving application data and shutting down the UPS when power fails.

2. Winpower Structure

Winpower contains three components: **Agent**, **Monitor** and **Traylcon**.

Note : The concrete meaning of Agent refer to Appendix A — glossary explanation.

Agent is the key component of Winpower and runs as a system service on background. Agent communicates with the device, logs events, notifies users when UPS's event happens, arranges actions according to user's requirement and impending shutdown when necessary. Furthermore, Agent can be managed by Monitor.

Monitor is the user interface application of Winpower. Relying on Agent, it gathers real-time information and status of the device, server information and allows user to set the control parameters of the device. It can run on any computer (individual or connected with network).

Traylcon is the management tool of Winpower. It exists on Windows platform only. It appears in the Status Area of System task bar. Traylcon has two different icons to display the current Agent status. The icons and the related status, please refer to the following table 1-2-1.

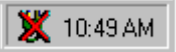
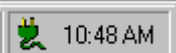
 10:49 AM	Indicate the Agent is Stopped.
 10:48 AM	Indicate the Agent is Running.

Table 1-2-1

When user right clicks the Manager icon, a shortcut menu will be shown. The menu items are listed as below.

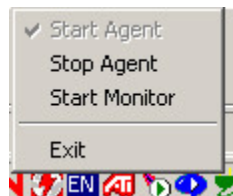


Diagram 1-2-1

The relationship between Agent and Monitor, please refer to the following Diagram 1-2-2.

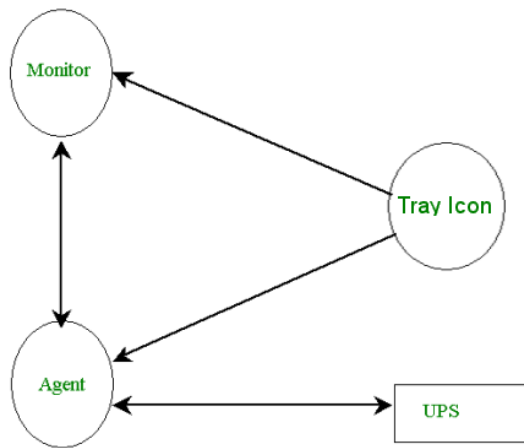


Diagram 1-2-2

3. Winpower Application Range

- ✓ Application of individual computers refers to the following Diagram 1-3-1.

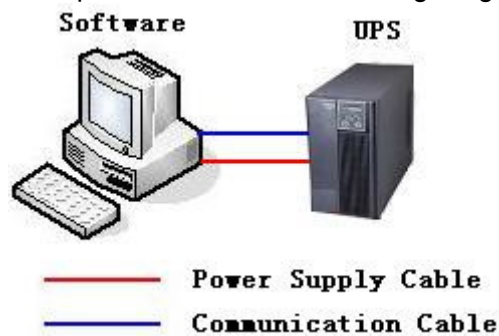


Diagram 1-3-1

- ✓ Application in the LAN refers to the following Diagram 1-3-2.

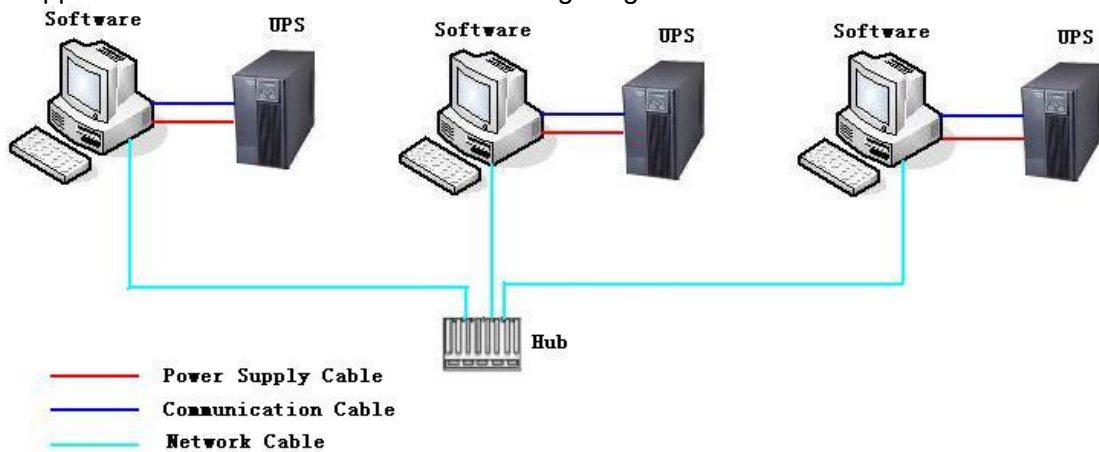


Diagram 1-3-2

- ✓ Application in the Internet refers to the following Diagram 1-3-3.

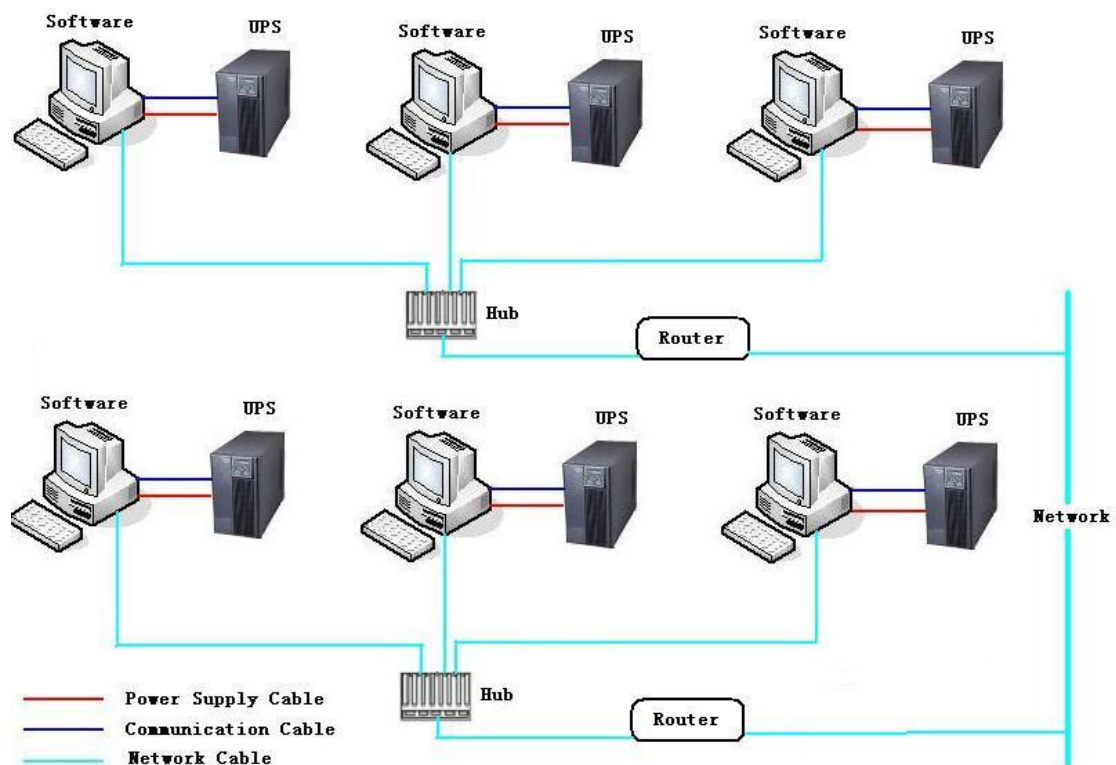


Diagram 1-3-3

4. Winpower Functions & Advantages

- ✓ When Agent is started, it will protect your equipment continuously in every moment.
- ✓ Uninstalled easily and clearly with no trace. Never increase the spending of system.
- ✓ You can have a detailed view about all information of the device, such as utility power, device type, load and battery. The information is shown in the same window, so you can take all the information in a glance.
- ✓ With the function of searching automatically and monitoring any device in the LAN.
- ✓ With the function of searching manually and monitoring any device in the Internet.
- ✓ With security protect function. The software administrator password can be set to prevent others from sabotaging. Only the software administrator has the right of full access, other users only have the right of view.
- ✓ With the function of data auto protection, it can close most of the running applications and save the related files.
- ✓ With the function of time turning on and off the device, it can give maximum protection to your computer system.
- ✓ With the function of time self test of the UPS, it can provide maximum protection to your UPS system.
- ✓ With the function of shutting down system by network, it supplies your system maximum protection.
- ✓ With the function of data logging (including utility power, device type, load and battery) and event logging, so that the software administrator can carry out the device system daily maintenance.
- ✓ Flexible means of information transfer let you know the device status at any moment and anywhere, never miss any one even though the change of time and place.
 - With the function of broadcasting messages to every users in the network.
 - With the function of sending messages via pager.
 - With the function of sending messages by Email.
 - With the function of sending SMS messages via mobile phone.

Chapter 2 Winpower Installation, Start & Uninstall

1. System Requirements

- 128 MB physical memory at least (256MB is recommended)
- 160 MB hard disk space at least
- More than 256 colors and 800 * 600 resolutions or above display is recommended
- The user is required to have the right as system administrator
- On Linux or UNIX operating system, user must log in system with **“root”** account to carry out the installation. After installation finished, system need to be reboot
- TCP/IP protocol must be installed to support network management
- An available communication port (RS-232 Serial Port or USB port) is needed while connecting to device with a special communication cable.

2. Platforms supported by Winpower include the following

Windows 98
Windows me
Windows NT 4.0 (sp6)
Windows 2000
Windows 2003
Windows 2008
Windows XP
Windows vista
Linux
Solaris/Sparc 2.6, 7, 8, 9,10
Solaris/Intel 2.6, 7, 8, 9 ,10
HP-UX 11.x, 11i.x
AIX 4.3.3, 5.1, 5.2
Mac OS X
Compaq Tru64 Alpha
SCO UnixWare 7.1.1, 7.1.3
SCO Unix 8.0
FreeBSD x86
SGI Irix 6.5.x

Note: Telecom power only supports the windows platforms.

3. Winpower Installation Steps

Note: The installation must be started with “root” account in Linux and UNIX systems! And after installation you must restart the system!

Enter the right directory of the CD according the system platform type.

For GUI mode environment:

✓ Insert the Winpower CD, find out the operate system of your computer (such as Windows) in the CD directory, Refer to Diagram 2-3-1 as below.

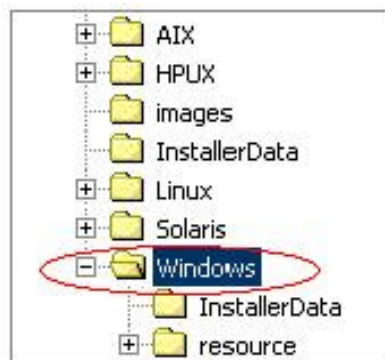


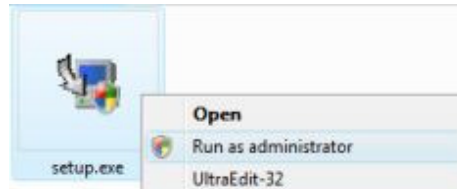
Diagram 2-3-1

For Windows platform, enter \Windows directory, run setup.exe to start the installation. Refer to the following diagram 2-3-2.



Diagram 2-3-2

Note: For windows vista platform, enter \Windows directory, you should run setup.exe as an administrator. Right click on the setup icon, then select "Run as administrator", a "user account control" dialog will pop up, please select "Allow".



For Mac OS X platform, enter \MacOSX\Disk1\InstData directory, double click the setup.app to start the installation. Refer to the following diagram 2-3-3-1.



Diagram 2-3-3-1

Click Lock Icon here. Refer to the following diagram 2-3-3-2.



Diagram 2-3-3-2

Input the Administrator account name and password. Refer to the following diagram 2-3-3-3



Diagram 2-3-3-3

For other operating system, execute ./setup.bin or setup_console.bin, Refer to the following diagram 2-3-4.



Diagram 2-3-4

Read the introduction. Refer to the following diagram 2-3-5.

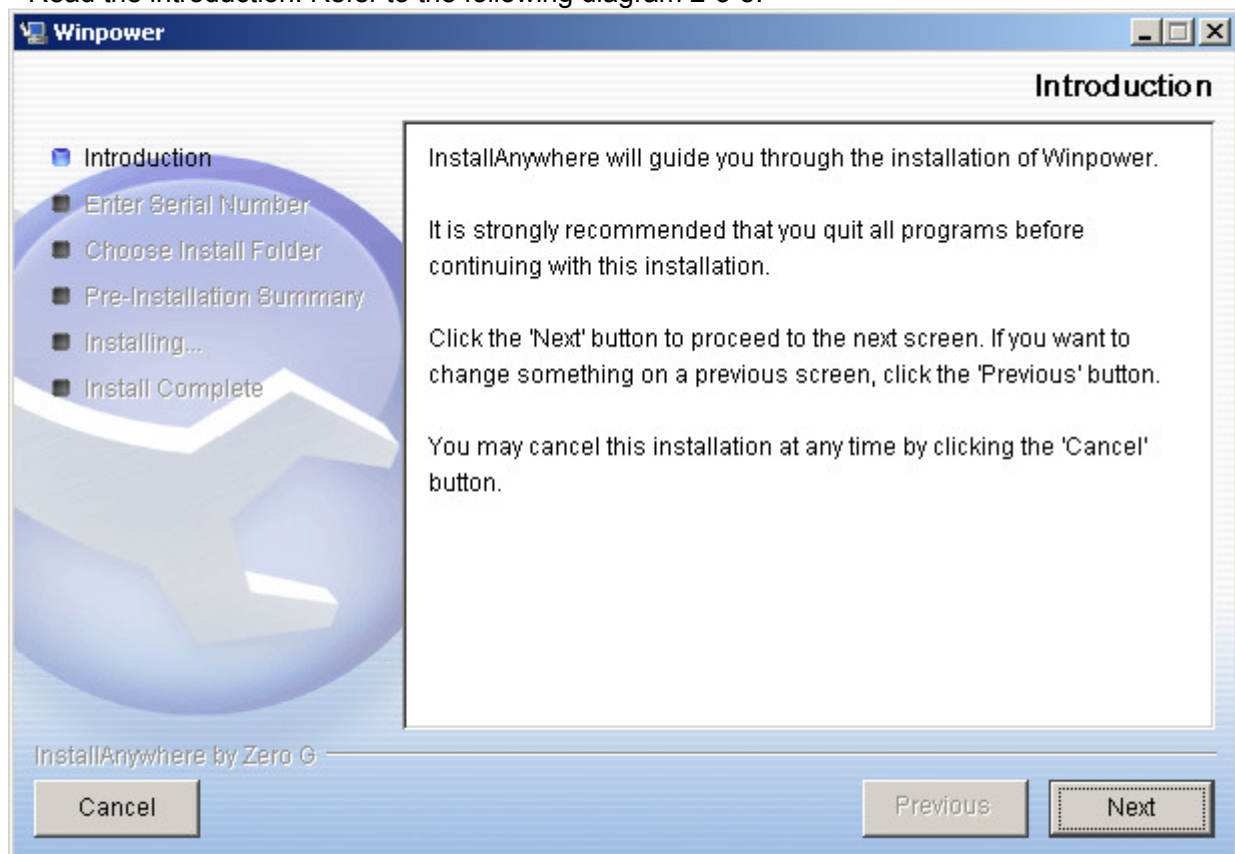


Diagram2-3-5

Click “Next” and input the Serial Number, Refer to the following diagram 2-3-6.

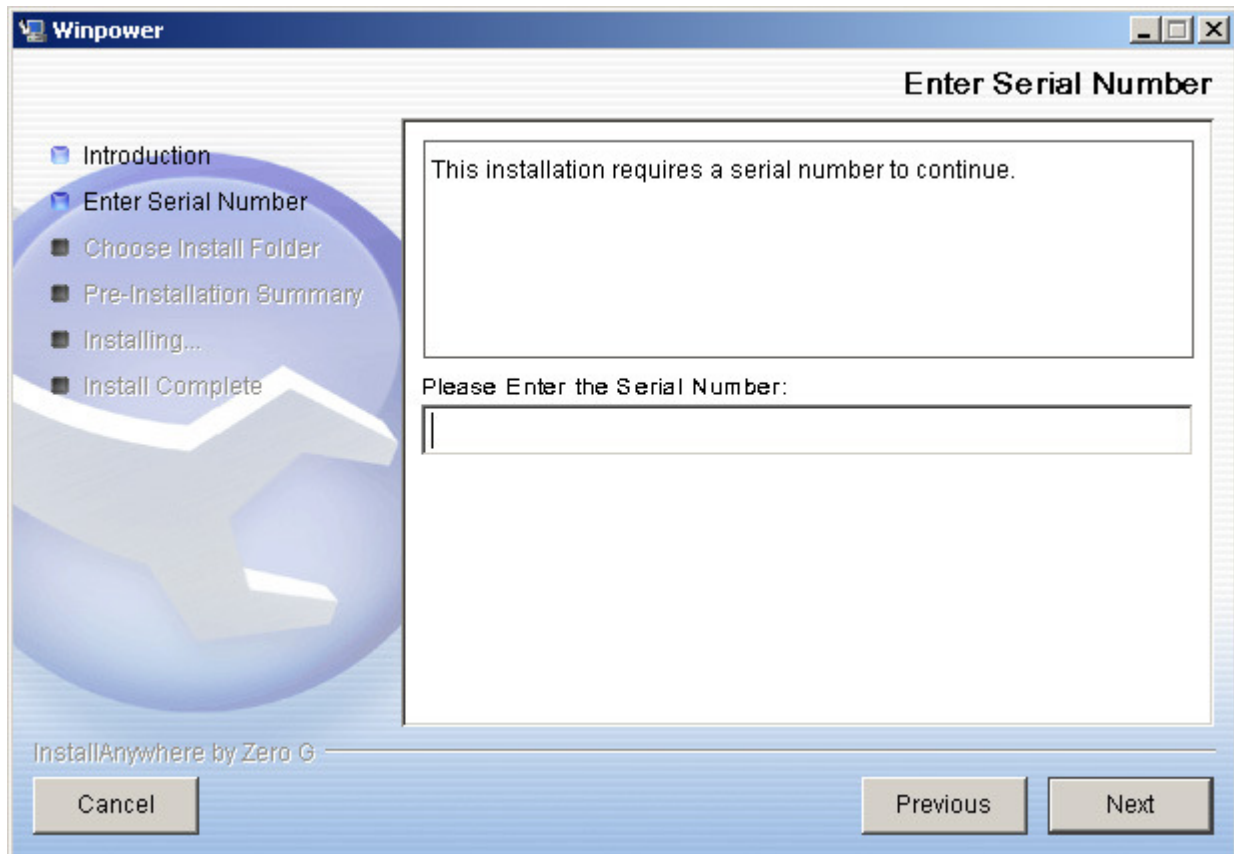


Diagram 2-3-6

Click “Next” and choose install folder. Refer to the following diagram 2-3-7.

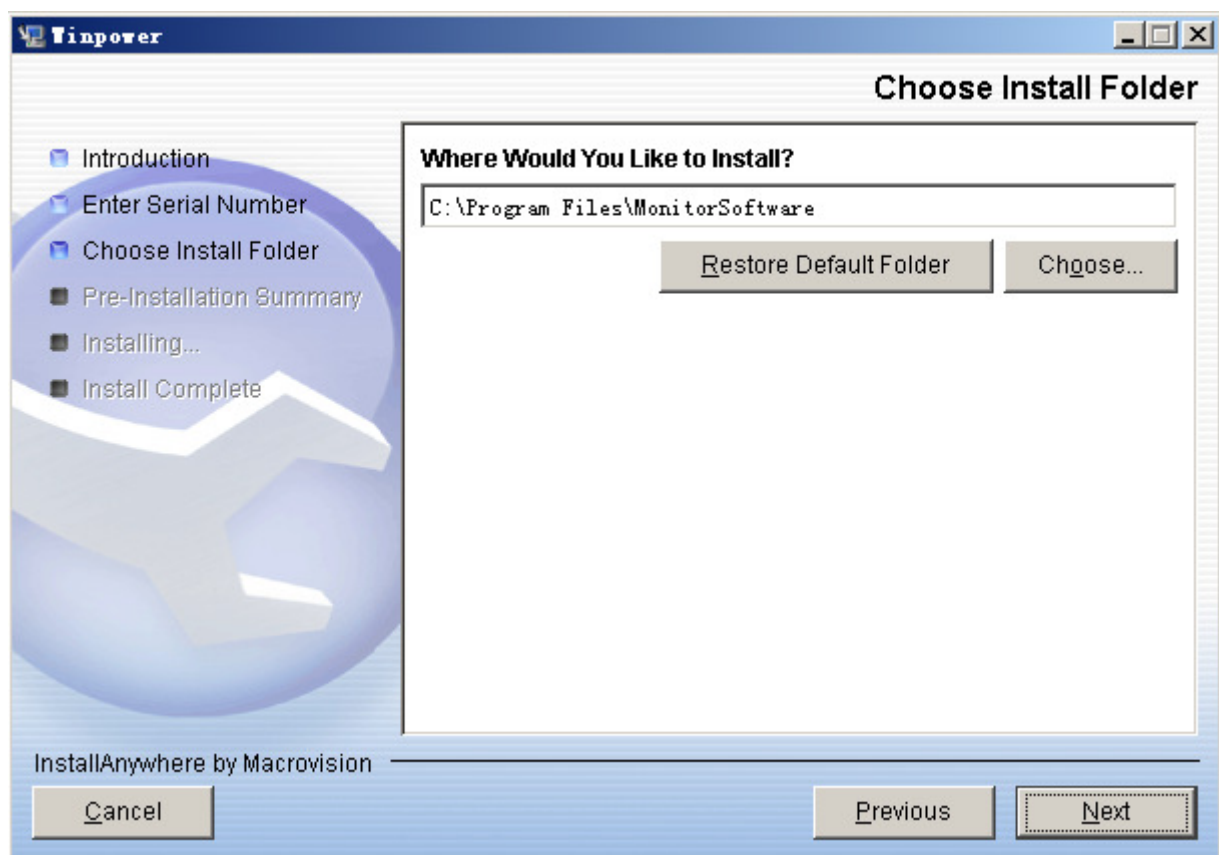


Diagram 2-3-7

Review the Pre-installation Summary. Refer to the following diagram 2-3-8.

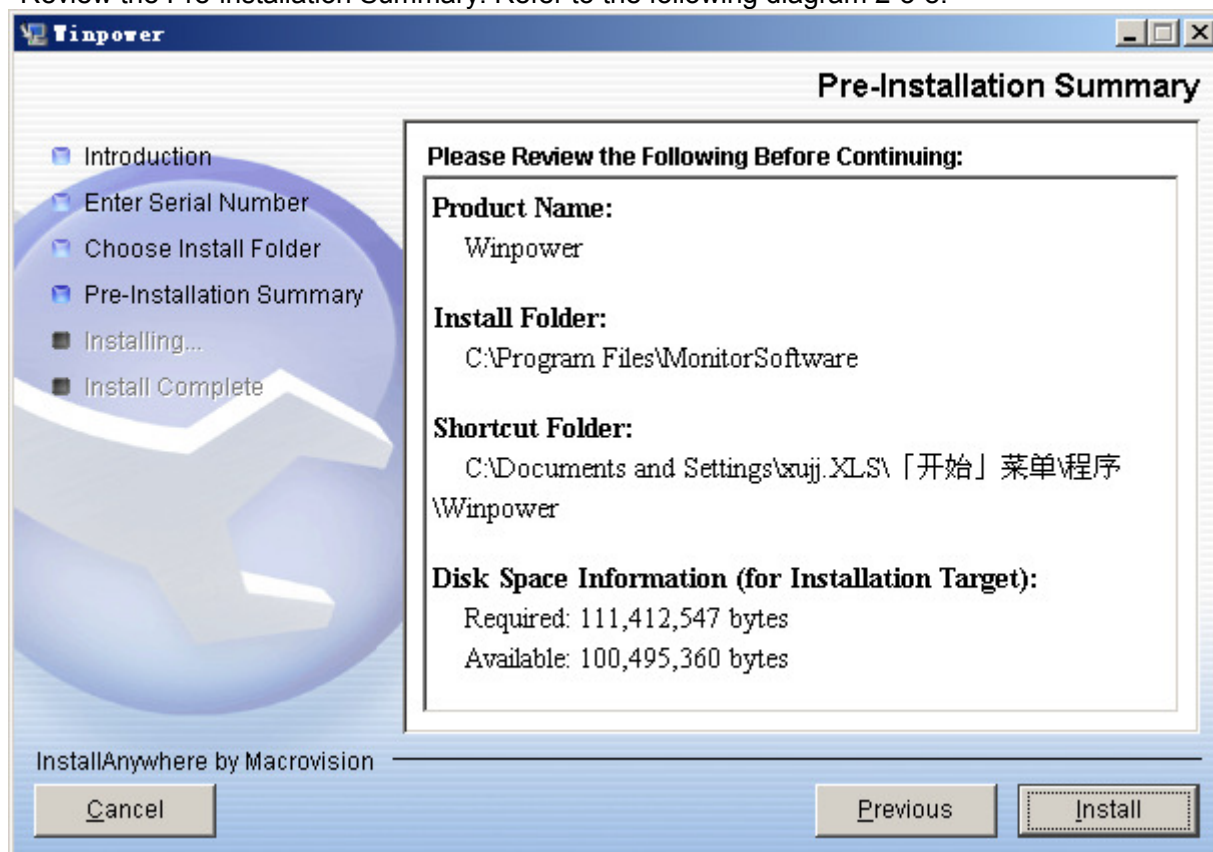


Diagram 2-3-8

The installing process, refer to the following diagram 2-3-9.

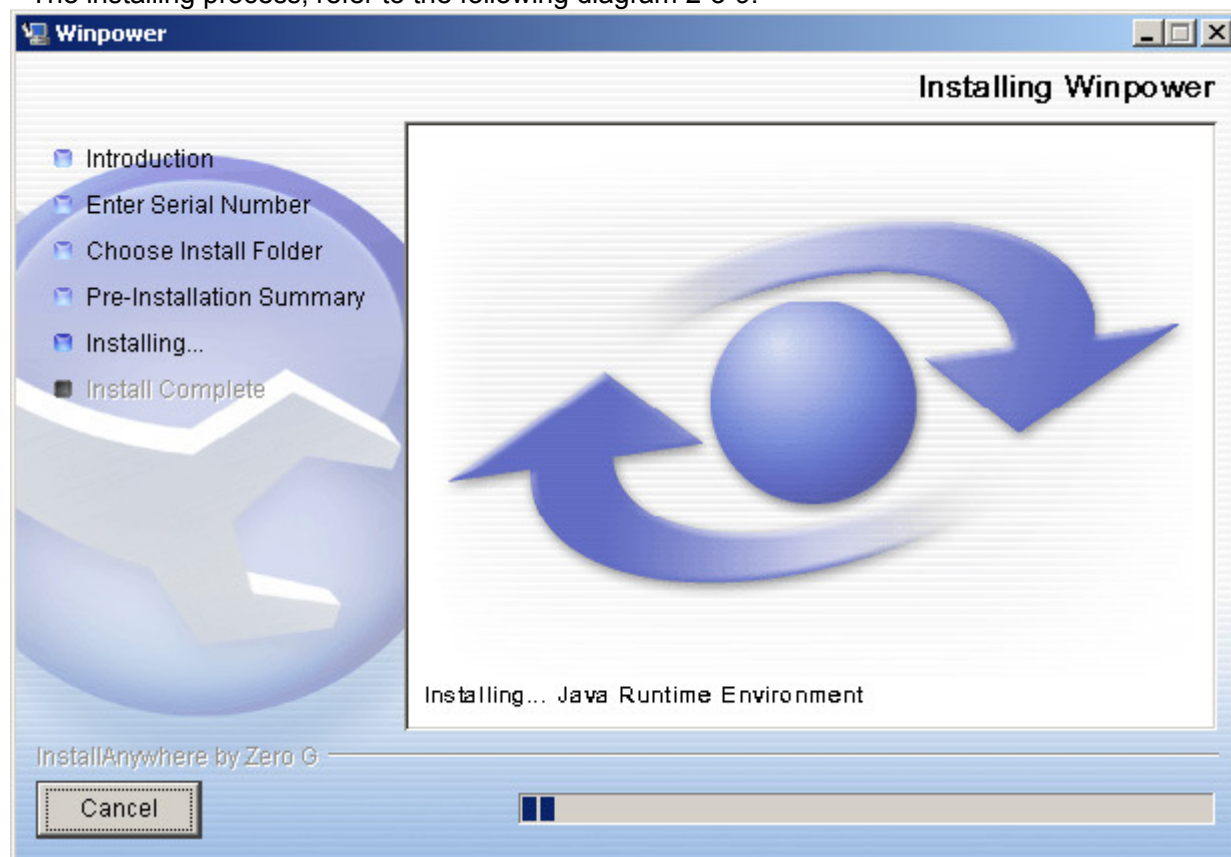


Diagram 2-3-9

When the installation program is completed, click “Done”. Refer to the following diagram 2-3-10.

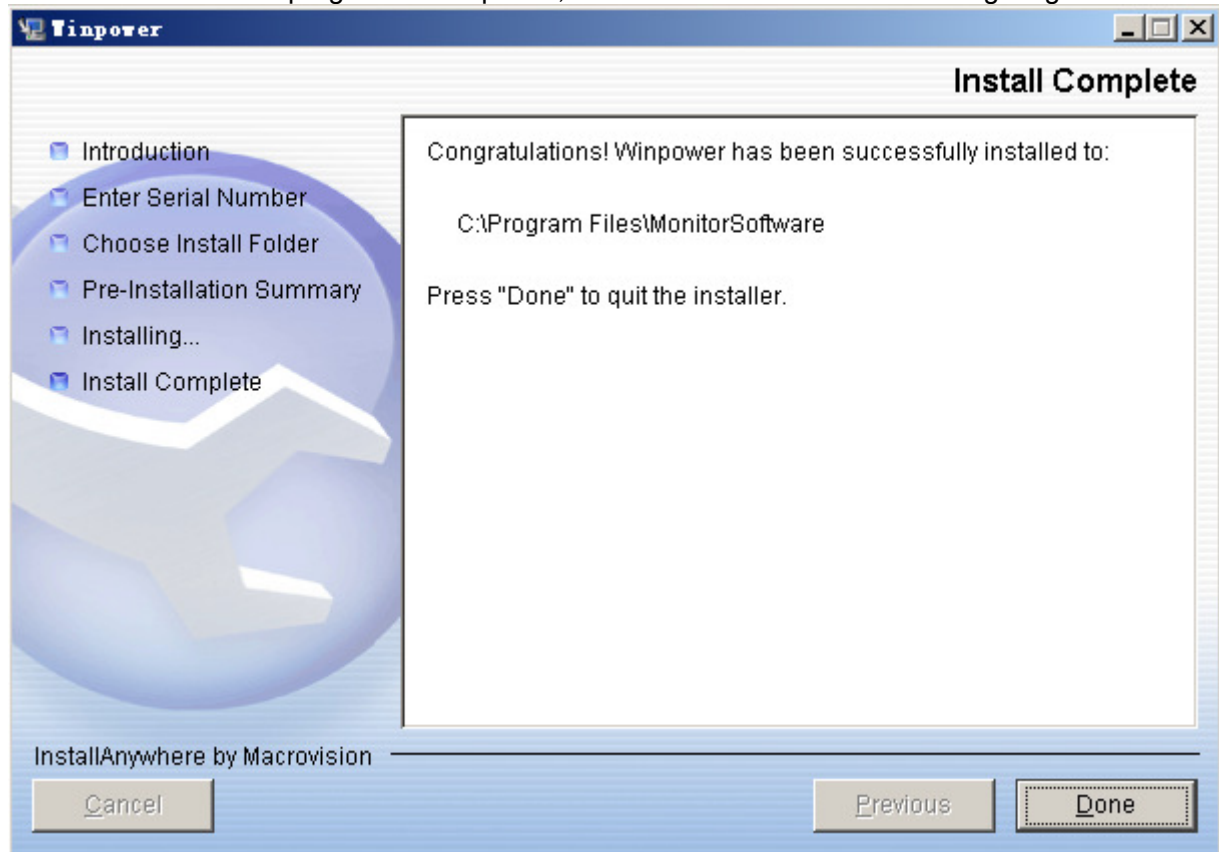


Diagram 2-3-10

If the software is installed successfully, winpower application can be found in the Start menu\Programs\.. Refer to the following diagram 2-3-11.

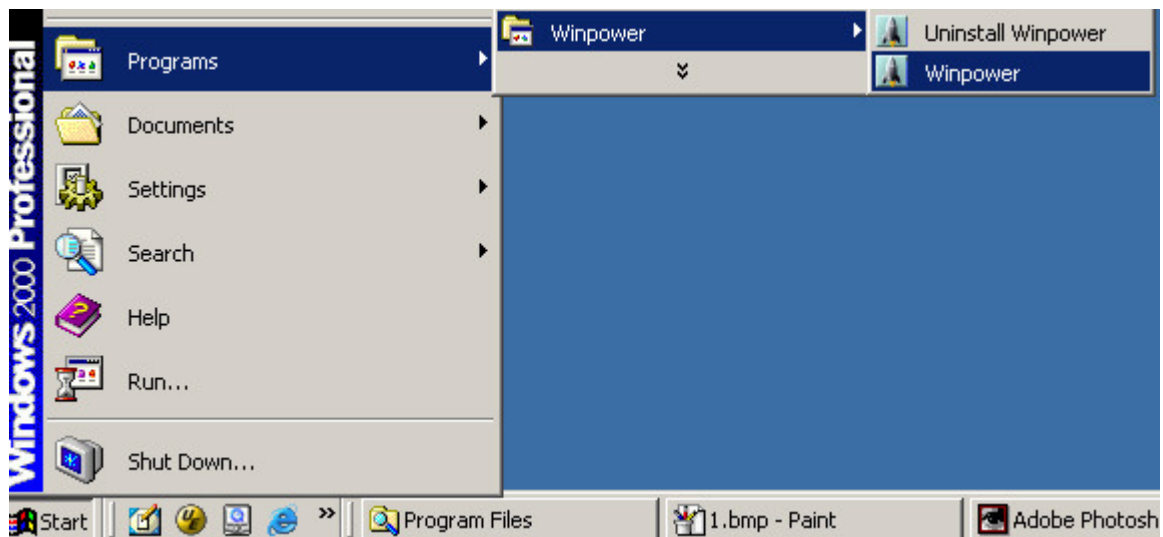


Diagram 2-3-11

For console mode environment:

1. Enter the directory according to the system, run setup.bin or setup_console.bin to start the installation program.

Note: For UnixWare platform, make sure JRE1.3.1 has been installed in your system, then enter the /GenericUnix directory to start the setup.

2. Read the information provided, press ENTER to continue the installation.
3. When the installation program is completed, click “Done”.
4. Reboot the Linux and UNIX system after installation.

The installation will set environment variables for Winpower in /etc/profile file. (For details to see 'Set environment variable' below). Reboot the system in order to make the setting valid.

4. Start/Stop Winpower In Windows operating system

✓ Start Agent:

Run the Winpower from Start\Program\Winpower will start the TrayIcon and Agent.

Refer to the Diagram 2-4-1 as below.

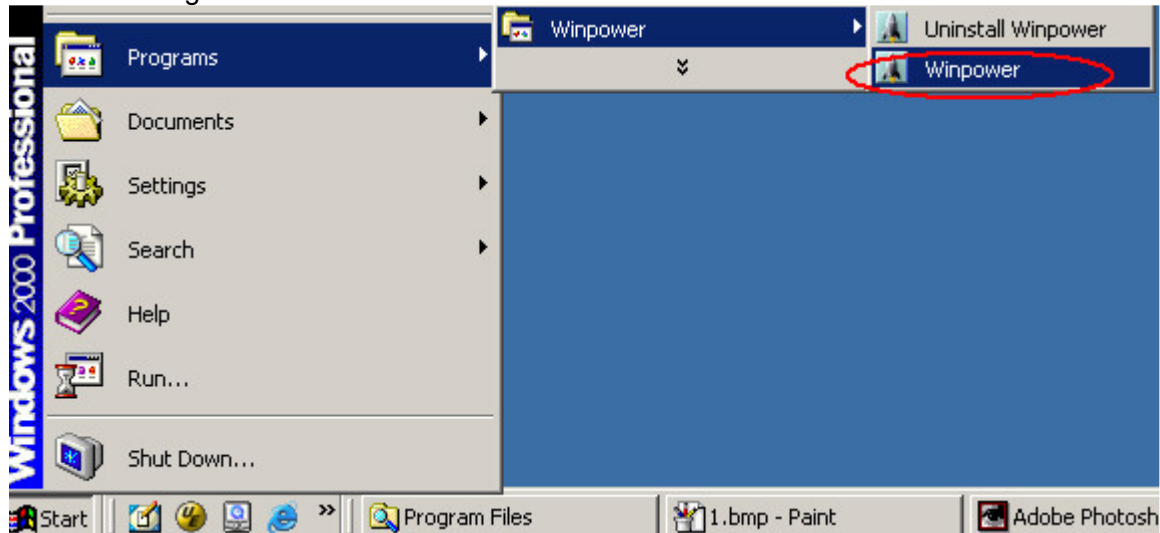


Diagram 2-4-1

The Agent can be start by the following methods:

- 1) Run the Winpower from Start\Program\Winpower will start the TrayIcon and Agent. Refer to diagram 2-4-1.
- 2) Right click the agent icon shown on the bottom right corner of the display and select the "Start Agent" item. Refer to Diagram 2-4-2.

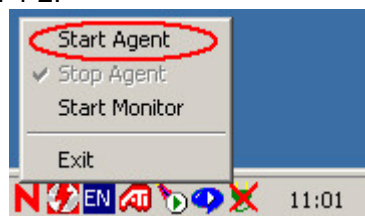


Diagram 2-4-2

- 3) On Windows operating system, agent can be started automatically when the computer reboots.

To start the Monitor, right click the TrayIcon, and select "Start Monitor", or double click the icon.

✓ Start Monitor:

Right click the TrayIcon and select the "Start Monitor" item. Refer to Diagram 2-4-3.

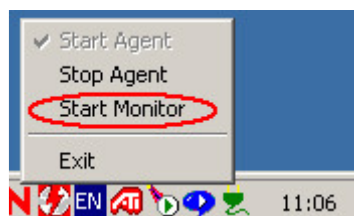


Diagram 2-4-3

✓ Stop Agent:

Right click the TrayIcon and select the "Stop Agent" menu item. Refer to the following diagram 2-4-4

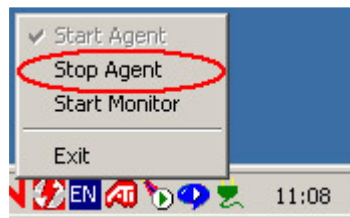


Diagram 2-4-4

✓ **Exit:**

On vista OS, if you want to exit, right click the winpower Software tray icon, and select “Exit”. Once you exit it, you should restart the computer to start it automatically. But if you have administrator privilege, you can start it again without restart. There are two steps: the first to start the agent, open the “Services” from the “Start menu” > “Control Panel” > “Administrative tools”, and find the service “winpowermonitor”, right click on it, select “Start”. The second to start TrayIcon, click the winpower soft from Start menu > Program \ Winpower.

For other windows OS, to exit, right click the winpower Software tray icon, and select “Exit”. If you want to start TrayIcon, just click the winpower soft from Start menu > Program \ Winpower.

On Mac OS X

Set Agent to be auto started when System boots:

Open “System Preferences -> Accounts -> Login items”, click “+” icon to add the “Applications/Winpower/Agent” as Login auto start item. Refer to the following diagram 2-4-5.

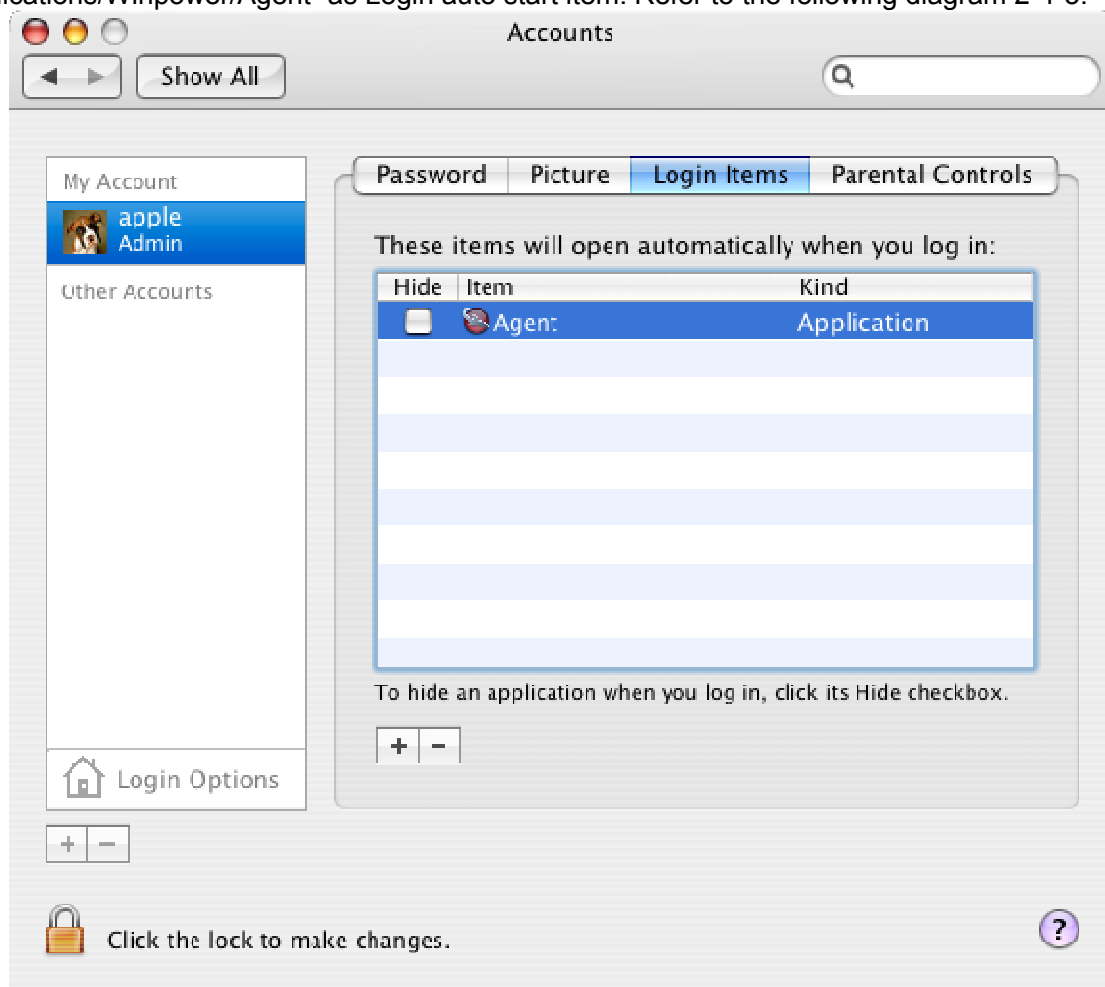


Diagram 2-4-5

Start Agent:

You can double click the agent link in "Applications/Winpower" directory to start the Agent.

You can also start it in terminal by enter install directory and execute command:

Enter “/opt/MonitorSoftware” directory and execute command:./agent start

Start Monitor:

Double click the executable monitor link in "Applications/Winpower" directory to start Monitor.
You can also start it in terminal by enter install directory and execute command:./monitor

Stop Agent:

Enter install directory and execute command:
./agent stop

On Linux and UNIX:

Start Agent:

Enter "/opt/MonitorSoftware" directory and execute command:
./agent start

Start Monitor:

Enter "/opt/MonitorSoftware" directory and execute command:
./monitor

Stop Agent:

Enter "/opt/MonitorSoftware" directory and execute command:
./agent stop

5. Uninstall Winpower

On Windows operating system

There are two methods of Uninstalling Winpower

- ✓ One is to click "Uninstall Winpower" icon in "Start/Program/Winpower" with left mouse button, refer to Diagram 2-5-1 as below.

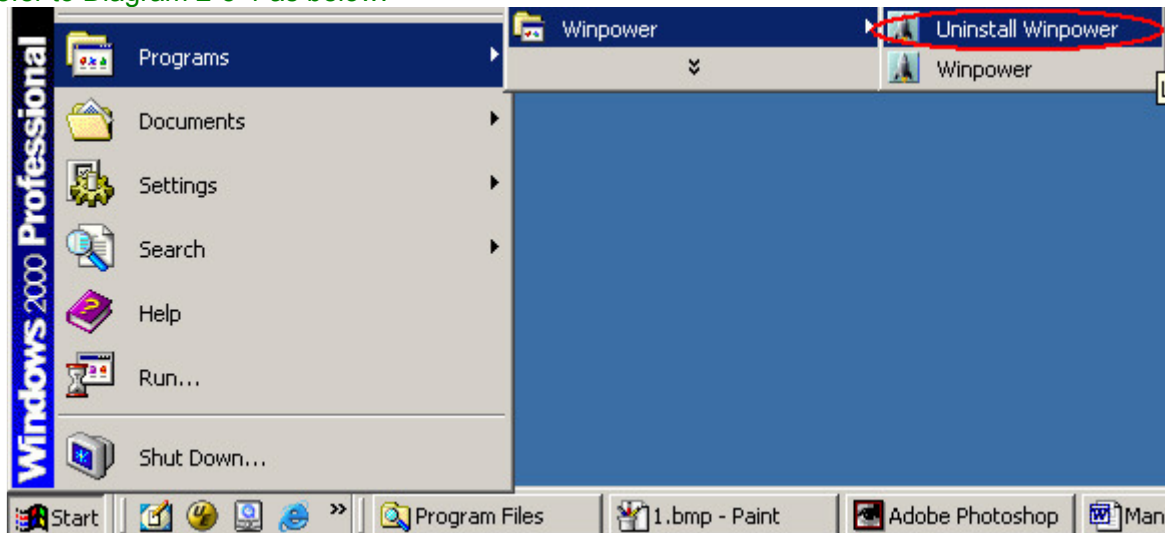


Diagram 2-5-1

Note: On Vista, make sure you have administrator privilege, right click and select "Run as administrator".

- ✓ The other is to left click "Control Panel"/"Add/Remove Program"/"Change/Remove(C)" button, refer to Diagram 2-5-2 as below.

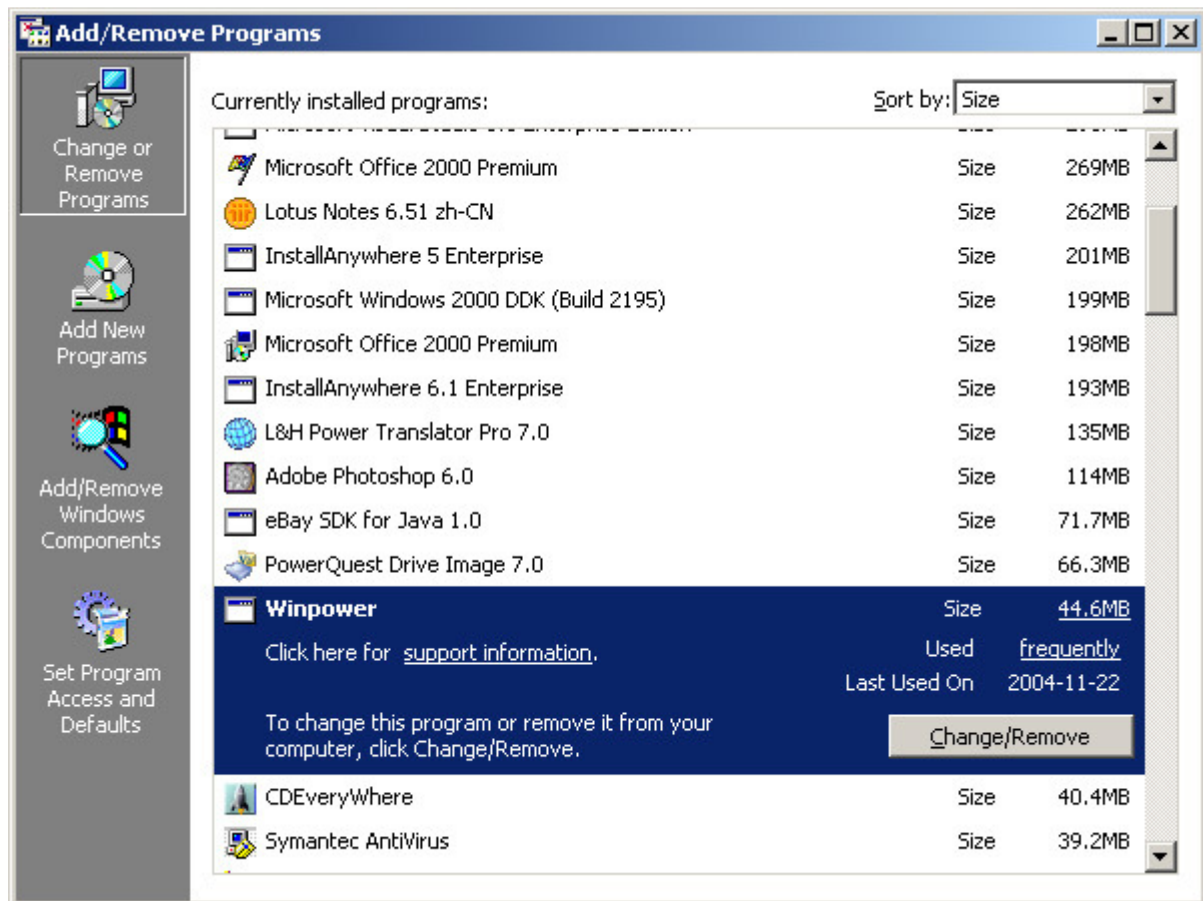


Diagram 2-5-2

Note: Before uninstalling Winpower, you must stop all Winpower program first! Otherwise it can't be uninstalled completely.

- After left click, the Uninstall Program will pop up a dialog shown on Diagram 2-5-3 as below.

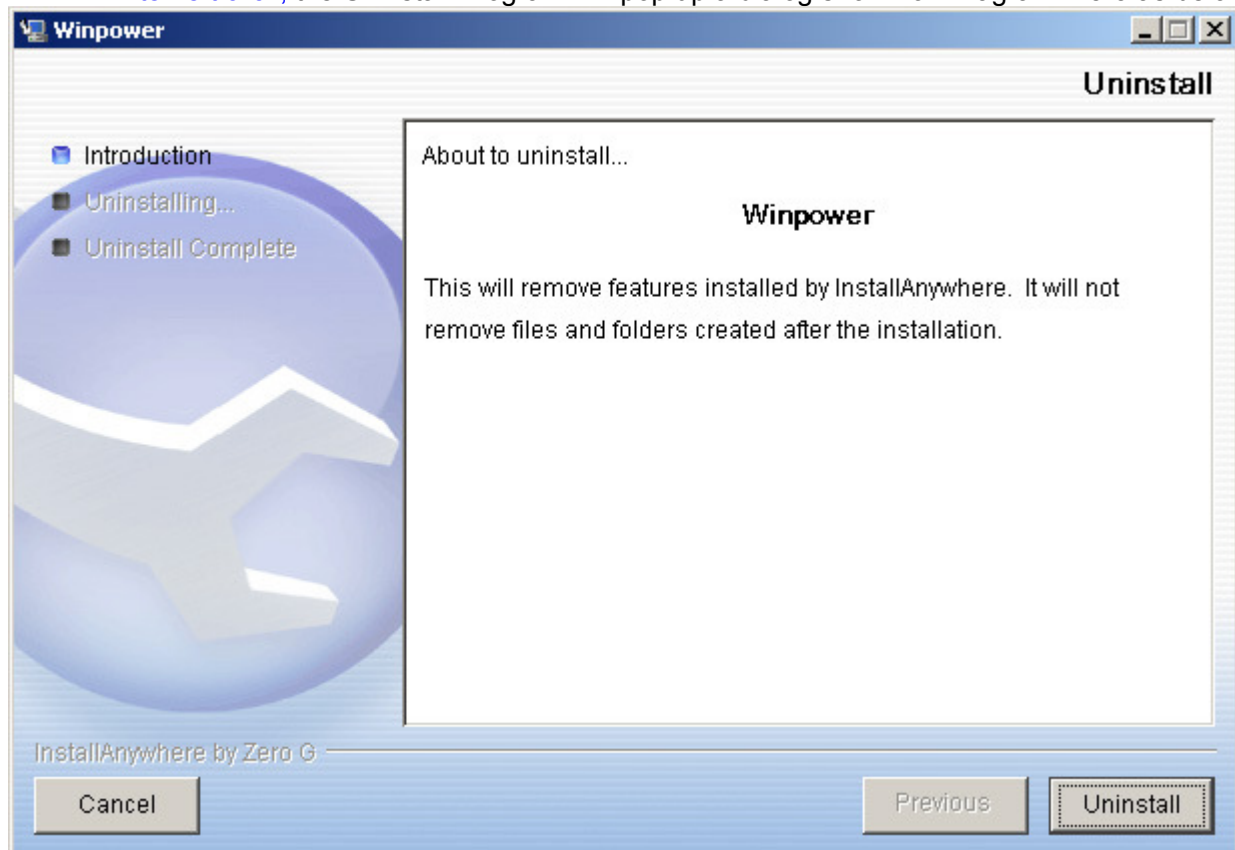


Diagram 2-5-3

Click the “Uninstall” to begin to uninstall Winpower software, refer to the following diagram 2-5-4.



Diagram 2-5-4

Click “Done” and Winpower has been uninstalled completely. Refer to the following diagram 2-5-5.

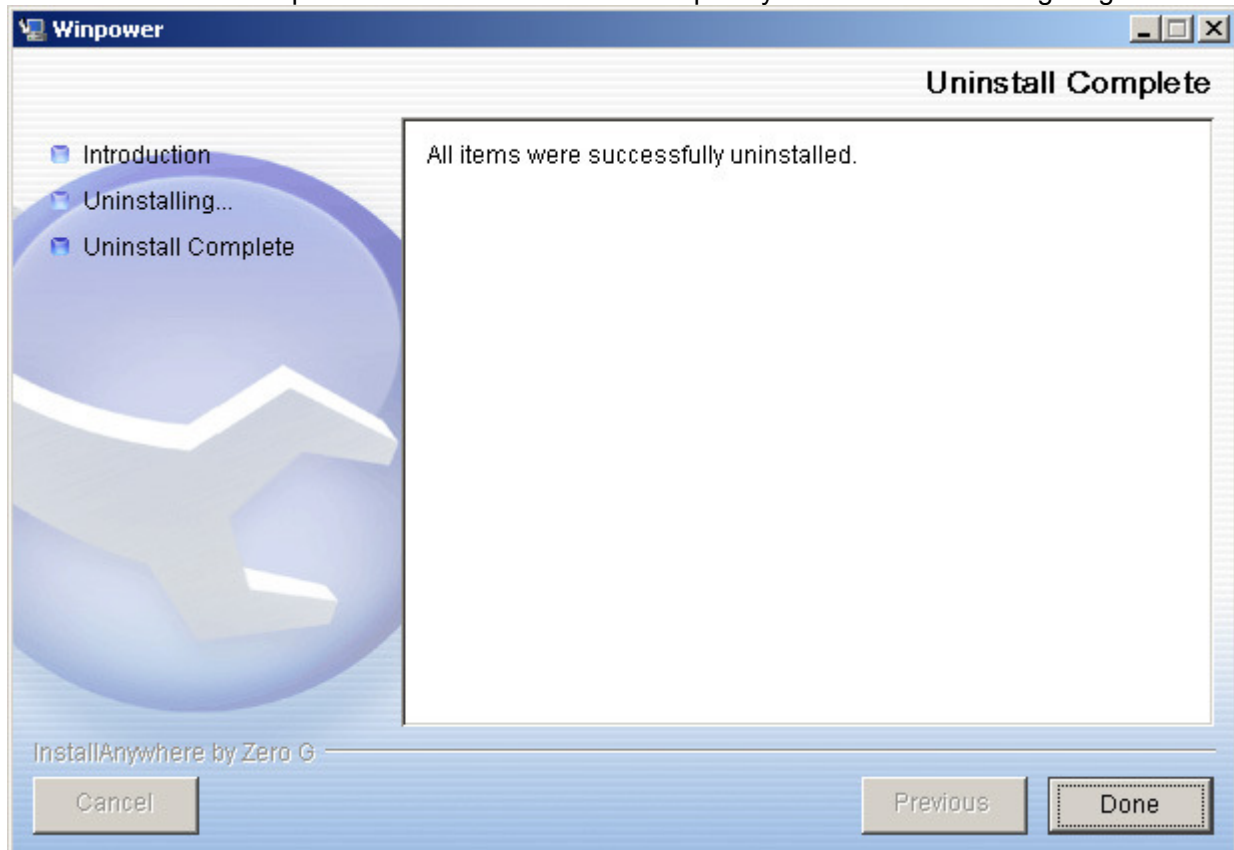


Diagram 2-5-5

On Mac OS X:

Open the Terminal from “Applications/Utilities/Terminal”, execute commands:

cd /opt/MonitorSoftware

sudo ./Uninstall

Input the system account password when it prompts, and uninstall will be carried out with administrator privilege. The software can be uninstalled completely.

If you only execute the command “*./Uninstall*”, maybe some files of the software can’t be uninstalled.

On Linux and UNIX:

Open the Terminal, enter “/opt/MonitorSoftware” directory and execute command: *./Uninstall*

Chapter 3 Winpower User Interface

1. "Winpower Manager" window

Winpower Monitor shows "Winpower Manager" window, which displays a list of agents within the LAN.

There is a tree view on the left side of the window, which displays a hierarchical list of items. Such as "Root", "networks", the Agent, the COM port, USB port and the UPS or ATS models or telecom power. By clicking an item for UPS, the user can expand or collapse the associated list of submenu. Refer to the following diagram 3-1-1.

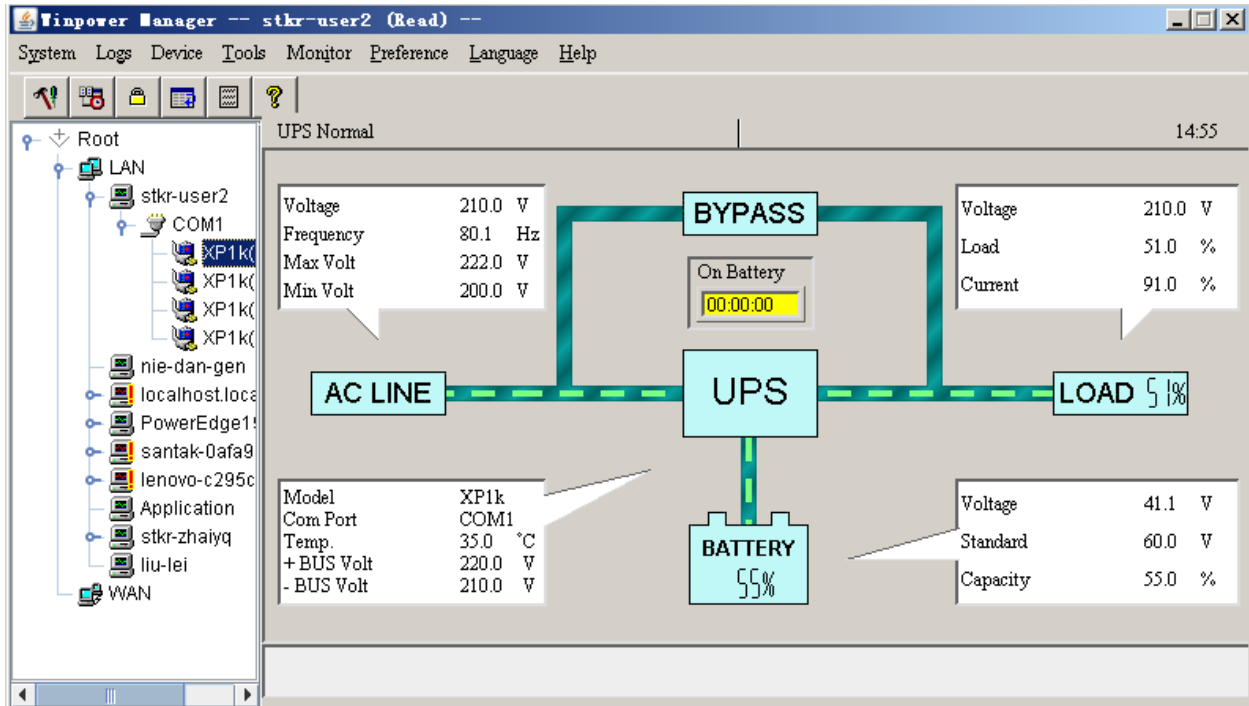


Diagram 3-1-1

For telecom power, the interface is different, Refer to the following diagram 3-1-1-1.

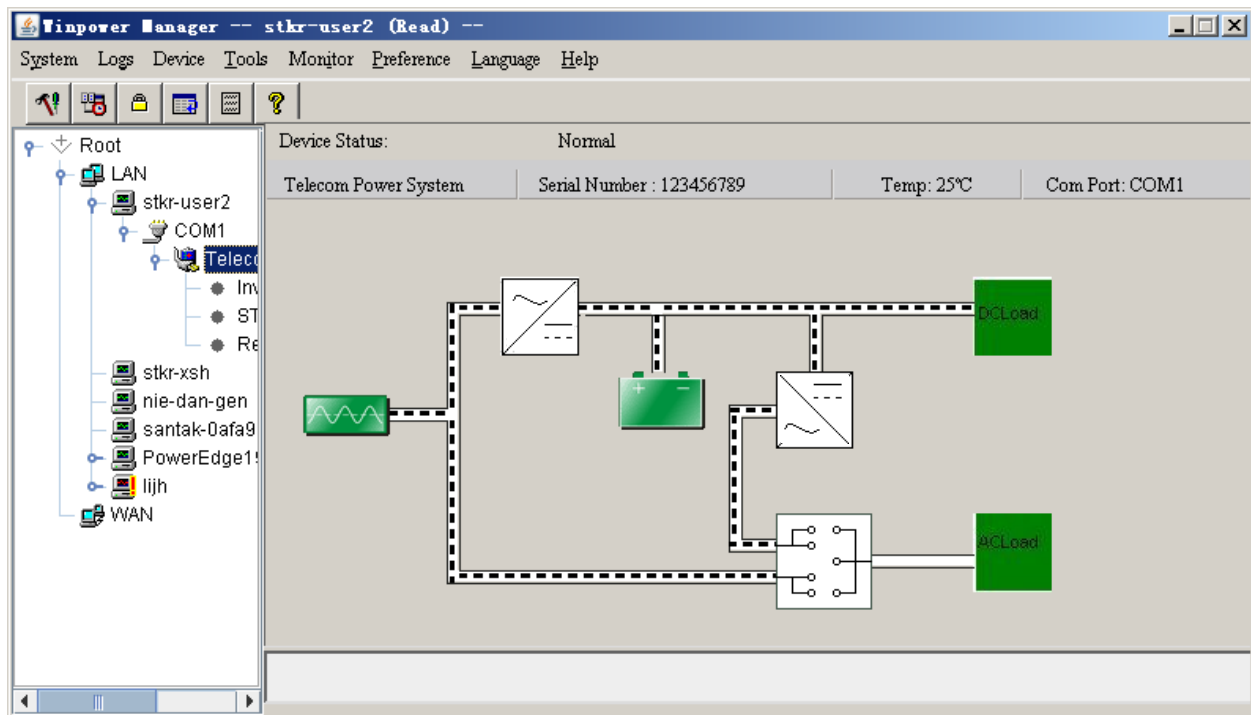


Diagram 3-1-1-1

For ATS, refer to the following diagram 3-1-1-2.

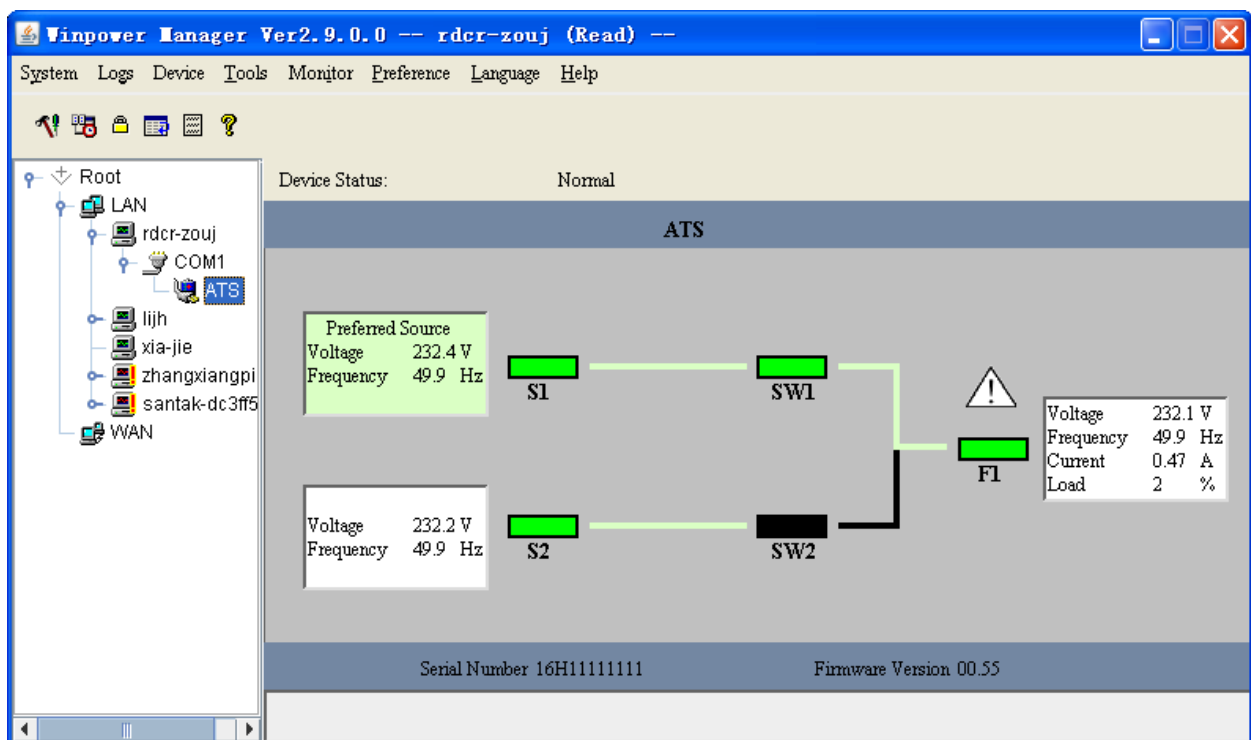


Diagram 3-1-1-2

If you select one of the UPS model from the List, details about it will be displayed on the right side, Refer to the following diagram 3-1-2-1.

1. The middle area displays the UPS Status Figure. The Status Figure is different according to various UPS status and UPS type.

2. The upper area displays the UPS Status Description and recommendation, and the Agent system times with right align.
3. The lower area displays last two events information.
4. It is able to minimize the window by clicking the minimum button on the top right corner of the window.
5. It is able to exit from the system by clicking "X".

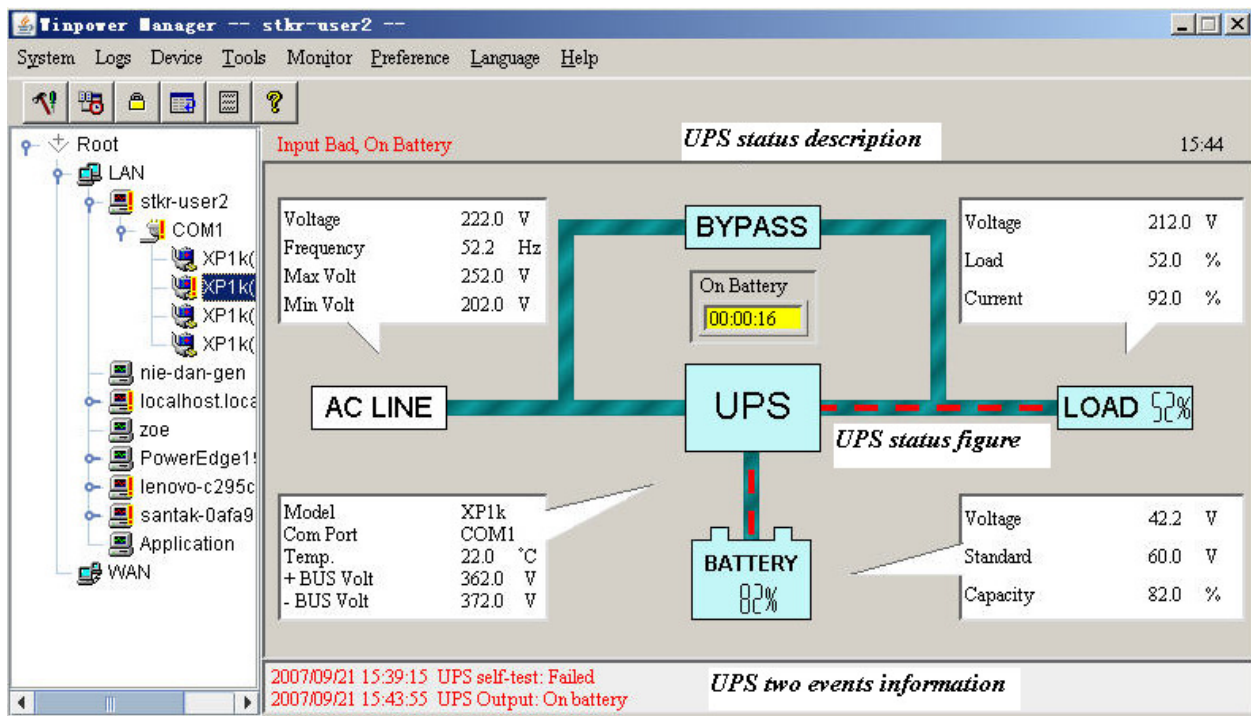


Diagram 3-1-2-1

Illustration of UPS Status information bar:

The UPS status figure contains five parts: AC LINE, UPS, BATTERY, LOAD and BYPASS.

If you select one of the telecom power models from the List, details about it will be displayed on the right side, Refer to the following diagram 3-1-2-2:

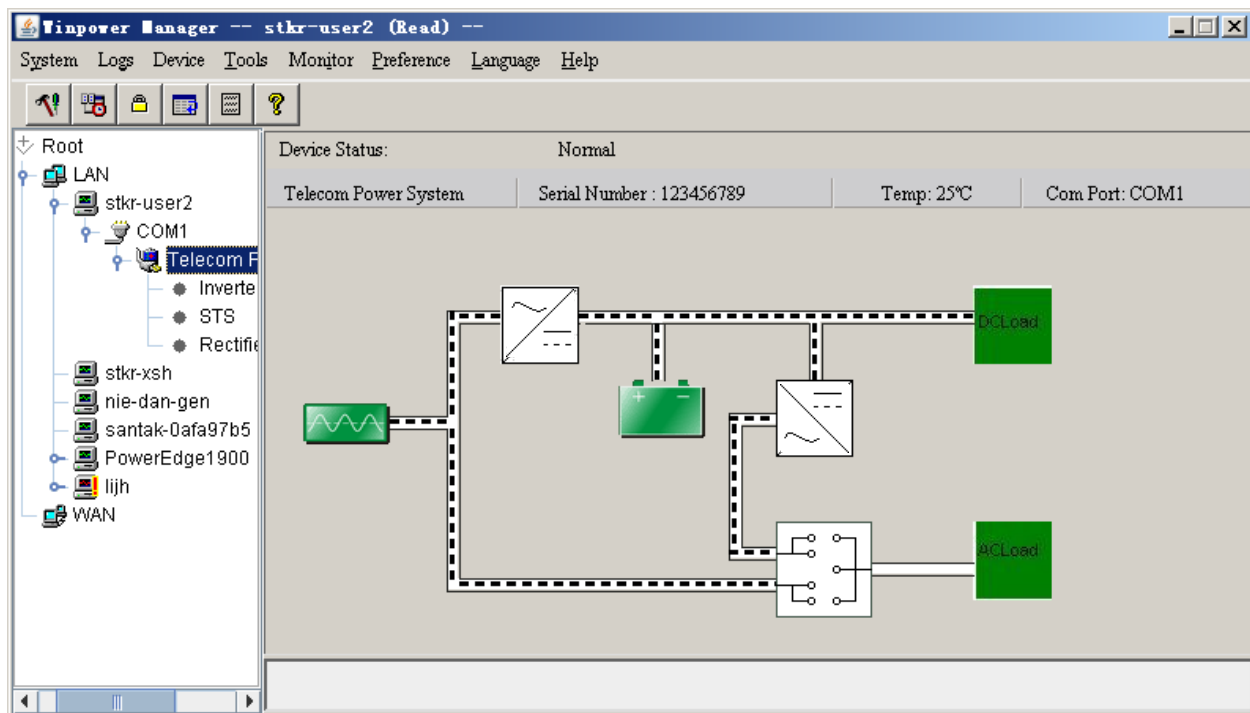


Diagram 3-1-2-2

1. The middle area displays the telecom power Status Figure. The Status Figure is different according to telecom power status. If there is something wrong with some module, the related figure will turn red. For example, STS in above figure. Otherwise, it is green or white.
2. The upper area displays the telecom power Status Description. If one or more module of inverter, STS, or rectifier has broken, it will show "inverter/STS/rectifier warning & fault" in red instead of detail warning or fault. If you would like to know the details, please select the module, and you will see more details about every module. Refer to the following diagram 3-1-2-3.

The screenshot shows the Vinpower Manager application window. The title bar reads 'Vinpower Manager -- stkr-user2 --'. The menu bar includes 'System', 'Logs', 'Device', 'Tools', 'Monitor', 'Preference', 'Language', and 'Help'. The left sidebar shows a tree view with 'Root' expanded, containing 'LAN', 'stkr-user2', 'COM1', 'Telecom Power', 'stkr-xsh', 'nie-dan-gen', 'santak-0afa97b5', 'PowerEdge1900', 'lijh', and 'WAN'. The 'Telecom Power' node is selected. The main area displays a table with the following data:

Module a...	Rating O...	Rating I...	Output H...	Output L...	Rating o...	Rating o...	Module s...
0	221.0V	221.0V	221.0V	221.0V	1232VA	50.0Hz	100000011
1	220.0V	220.0V	220.0V	220.0V	1231VA	50.2Hz	100000001

Diagram 3-1-2-3

If you select one of ATS models from the List, details about it will be displayed on the right side, Refer to the following diagram 3-1-2-4:

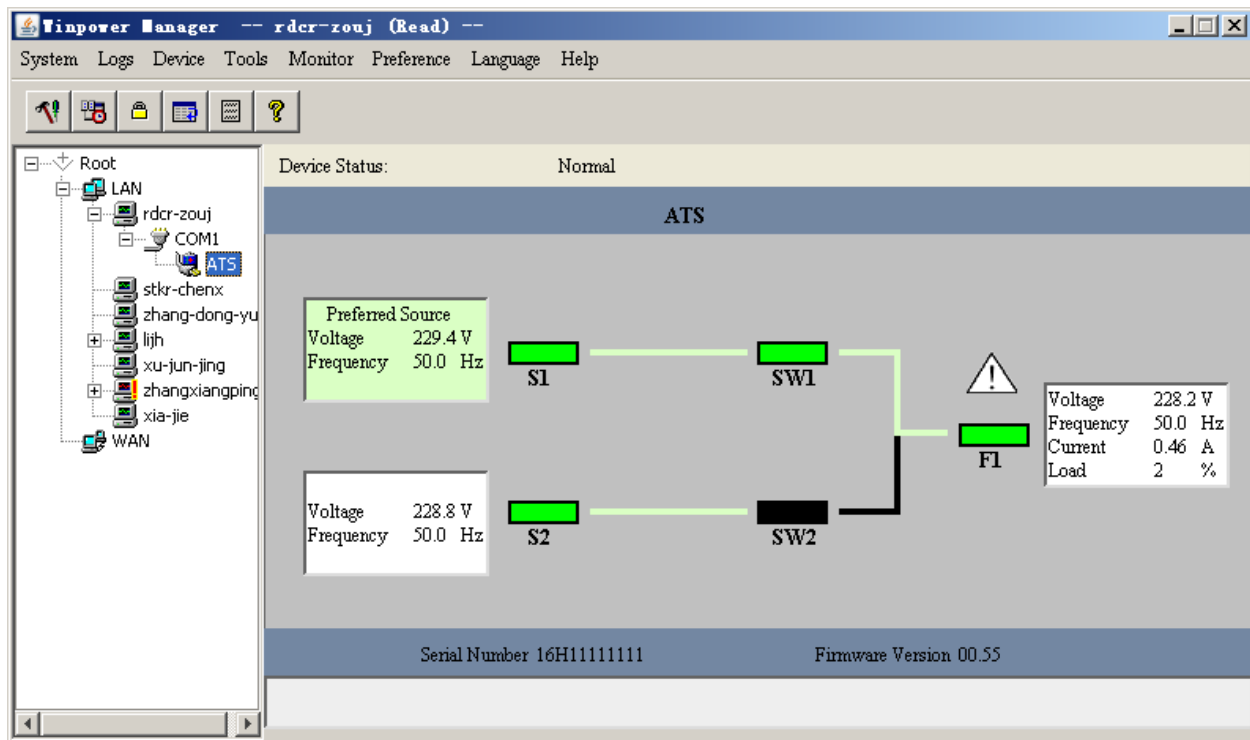


Diagram 3-1-2-4

1. The top area displays the manufacturer and model name of ATS. Sometimes, the manufacturer may not be shown. For example, "ATS" means that the model name is ATS. The bottom area displays the serial number and firmware version of ATS.
2. The middle area displays the ATS Status Figure. There are five lights: S1, S2, SW1, SW2, F1 and three information frames. Also, there are some current lines in black or green.
3. The S1 is black when Input source 1 failed (no power on source). It will flash when the voltage or frequency of source 1 is out of range or source 1 is unstable. It is green when source1 is OK. The S2 for source 2 is the same. The SW1 is green when the load is powered by input source 1. Otherwise, it is black. The SW2 is the same. The F1 in red indicates that the faults are detected, such as overload fault, stick fault or over current. Otherwise, the F1 is green.
4. The information frame on the left of S1 displays the input voltage and frequency of Source 1. S2 is the same. If it is the preferred source, then the "Preferred Source" string is shown. Also, the background color of the frame indicates whether it is the preferred source. If the background color of frame is green, then it is the preferred source, otherwise, it is white. The frame on the right of F1 displays the output information, such as output voltage, output frequency, output current and load percentage.
5. The lines between S1 and SW1, between S2 and SW2, between SW1 and F1, between SW2 and F1 indicate the current. If there is current between them, the line is green. Otherwise, the line is black.

2. Menu and Dialog

1) Auto Search Device

When user select "Auto Search Device" item from "System" Menu, Winpower will start searching for the device connect to the computer's serial port or USB port (for telecom power, the USB driver must be installed; For ATS, A crossover RS232 cable will be needed that crosses pins 2 and 3, so that pin 2 on one side is connected to pin 3 on the other.). See the following diagram 3-2-1-1 and diagram 3-2-1-2. Winpower can monitor not more than four COM ports and one USB port in one computer. Only on Windows 98/2000/2003/XP/Vista, Mac OS X and Linux (with kernel 2.6) can use the USB port. For UPS, no USB driver is needed. But telecom power's USB communication only works with Windows 2000/XP/Vista and need install the USB driver at directory USB driver.

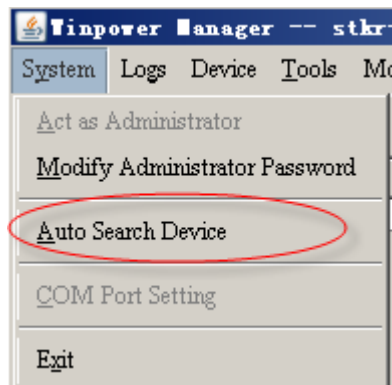


Diagram 3-2-1-1

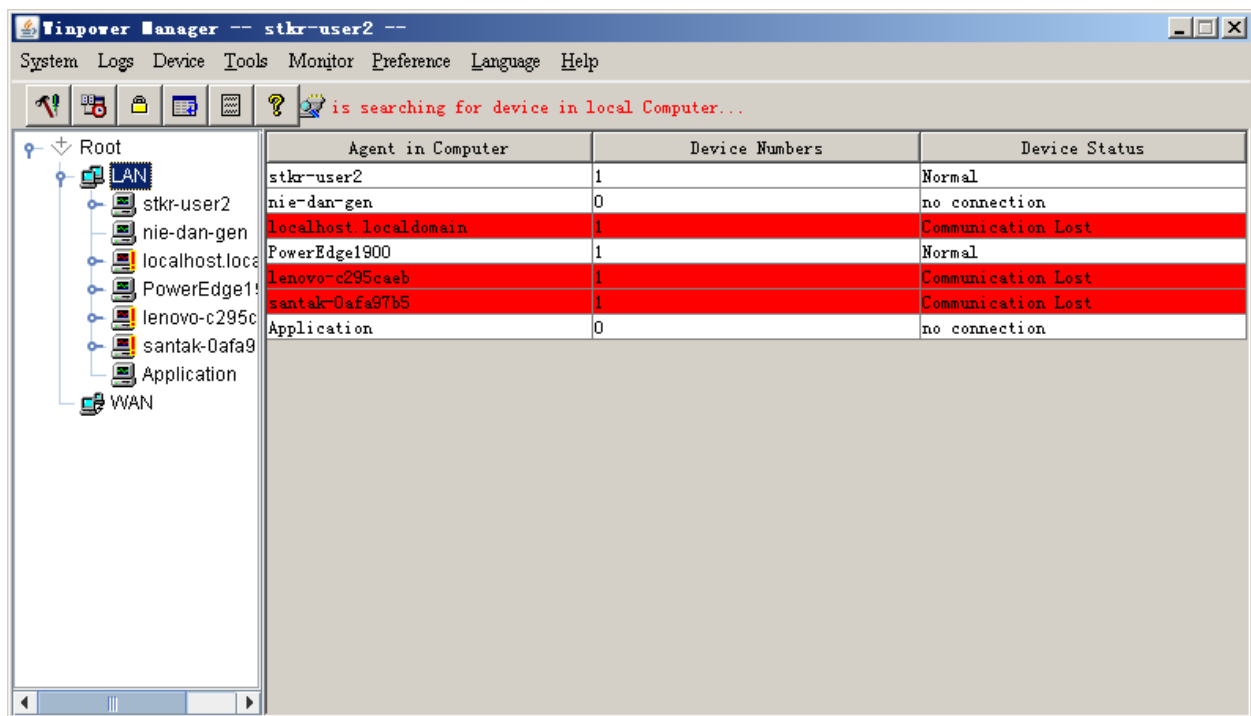


Diagram 3-2-1-2

By clicking the item in the tree view, user can get the information following, refer to the diagram 3-2-1-3.

- 1) All the computer running Winpower Agent on the LAN.
- 2) Device COM Port or USB Port.
- 3) The model type of Device to which the Agent is connecting.
- 4) The Current Status of the Agent which user selected in the tree view.

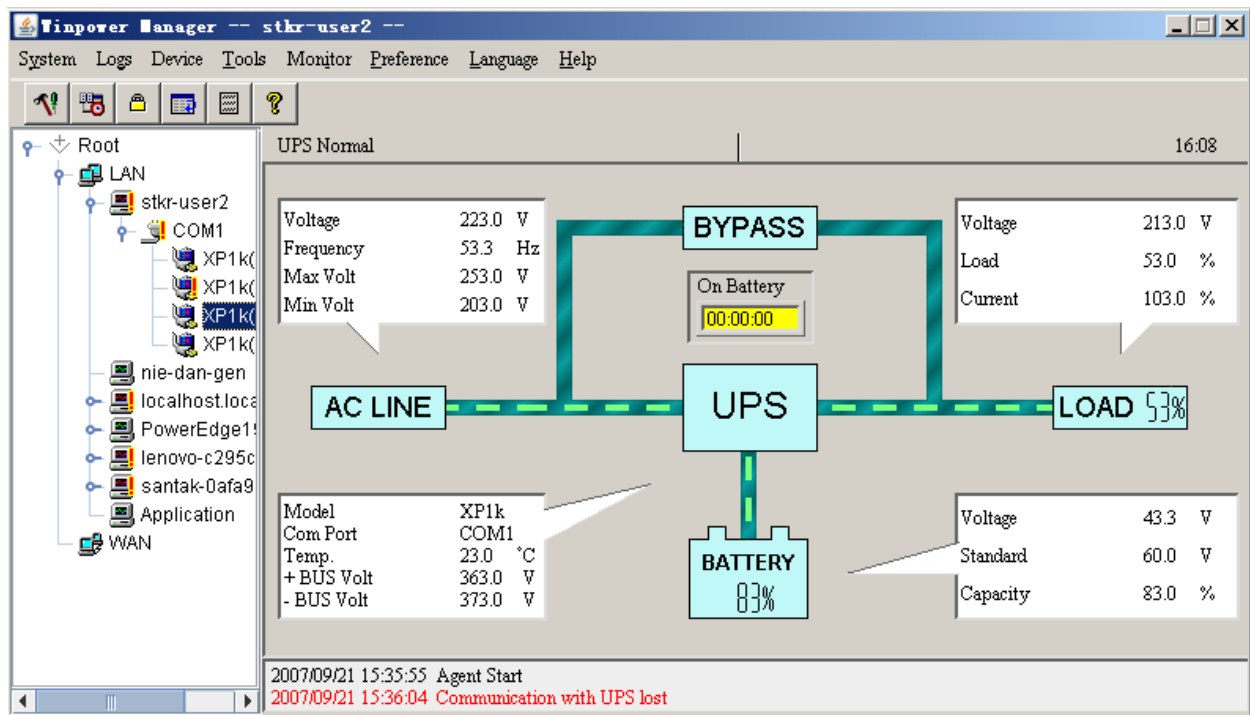


Diagram 3-2-1-3

2) "Administrator" Dialog

"Administrator" dialog can be opened by clicking "Act as Administrator" in the "System" menu. See the following diagram 3-2-2. Enter the administrator password in the edit box and then click "OK" button. If the password is not correct, the system will pop up a message dialog to prompt users that the user password is not correct. If the password is correct, users can get the administrator access right and set up the Agent.

Note: The initial password is "Administrator".

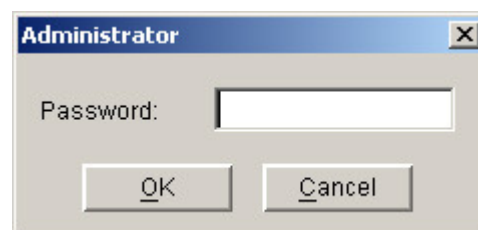


Diagram 3-2-2

3) "Administrator Password Settings" Dialog

"Administrator Password Settings" dialog can be opened from the "Modify Administrator Password" menu item of "System" menu. Refer to the following diagram 3-2-3.



Diagram 3-2-3

Administrator password only can be set by super user in local machine. If you are not a super user yet, the "Administrator" Dialog will pop up first for you to log on as an administrator.

User needs to enter a new password in the "New Password" text box and reenter the new password in the "Confirm Password" text box. If the passwords are not consistent with each other, a message dialog will pop up to notify the user that the password is not correct and request the user to enter it once again. If the passwords are consistent with each other and the button "OK" is selected, the new password will be accepted by the system.

4) "Event log Viewer" Dialog

"Event Log Viewer" Dialog will be shown when user selects the "Event Log" menu item from "Logs" Menu or click buttons from toolbar, or click the "View log" button of event log in the "Record Setting" dialog, then the "Event Log" dialog will pop up. Refer to the following Diagram 3-2-4. The dialog displays a list of history events.

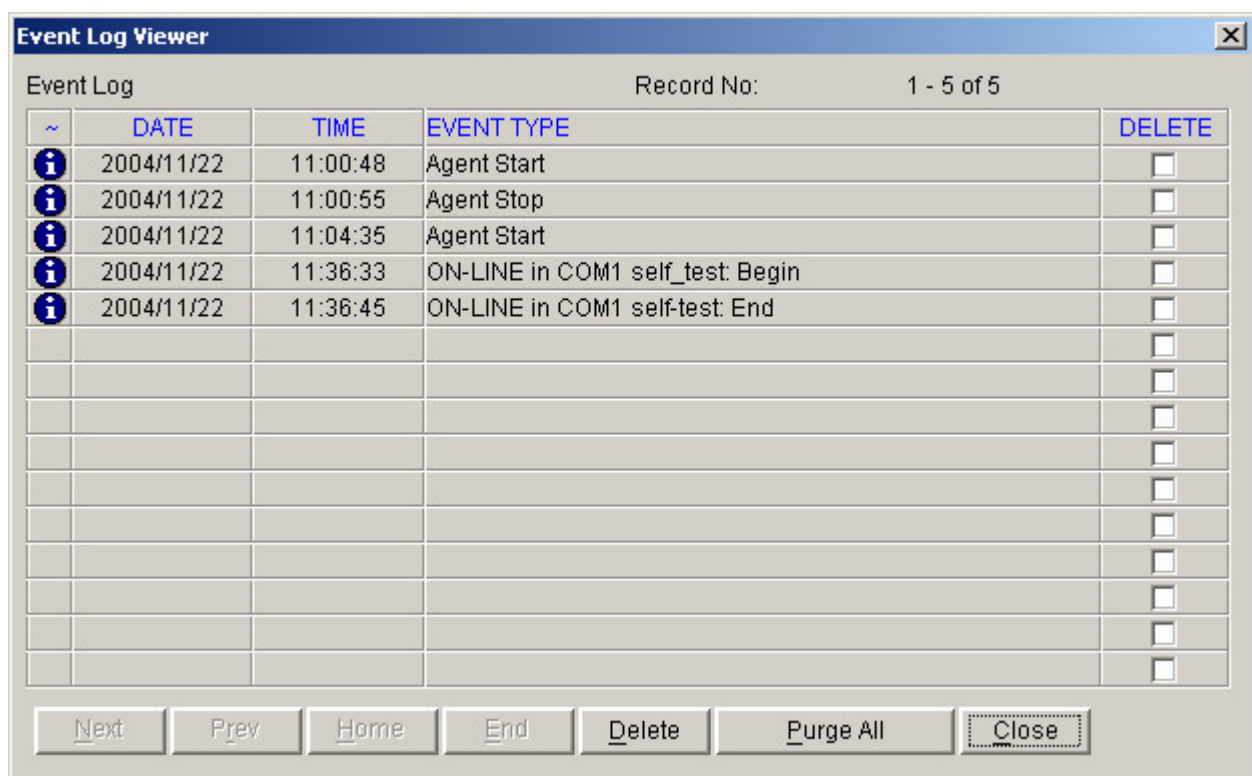


Diagram 3-2-4

User can select the check box "Delete" and click "Delete" button to remove the selected events.

User can click "Close" button to close the dialog.

User can click "Purge All" button to delete all of the events.

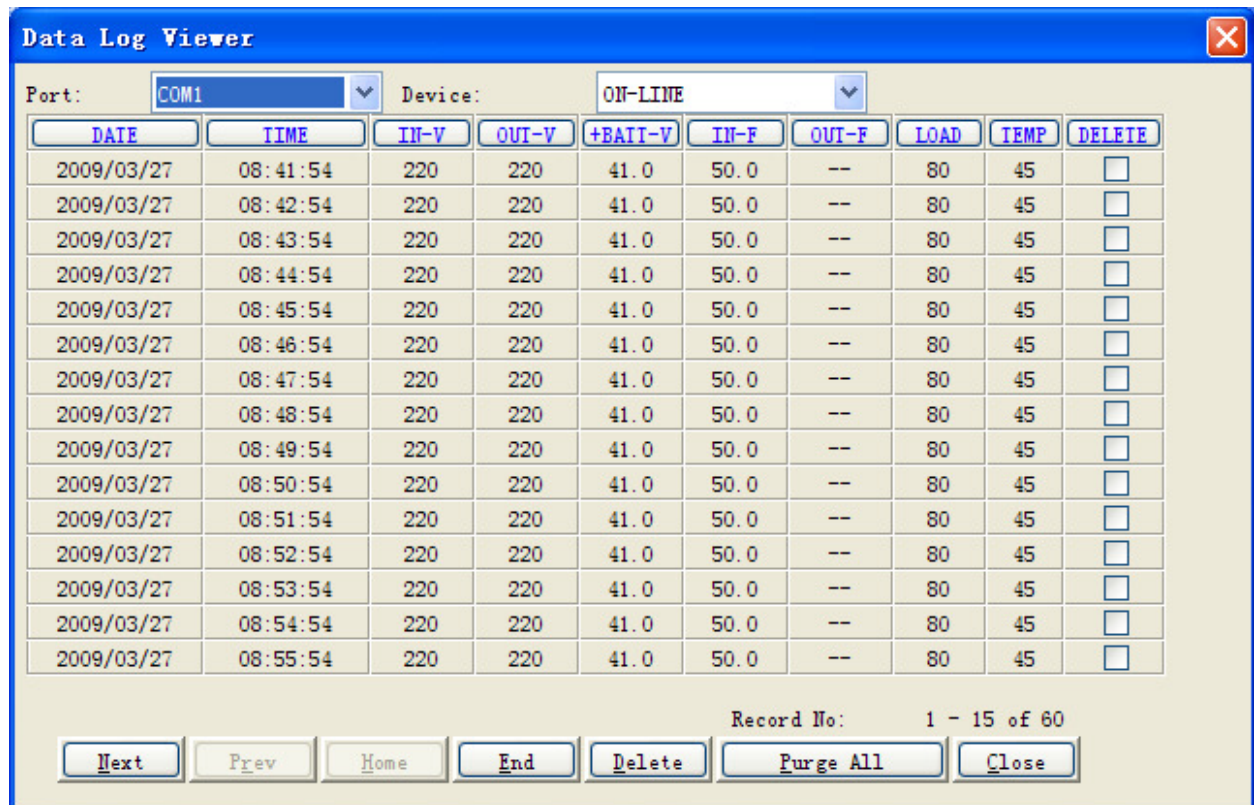
Note: If "Delete" and "Purge All" button are invalid, it means your access right to the current Agent is "Read Only", you can't carry out the operation. You should log in as a super user.

5) "Data log Viewer" Dialog

"Data Log Viewer" Dialog will pop up when user selects "Data Log" item of "Logs" Menu , or click buttons from toolbar or click "View log" button of data log in the "Record Setting" dialog. Refer to the following Diagram 3-2-5, the history data will be displayed in this dialog.

Users can select the port and UPS to show the data of that device.

Users can click “Next”, “Prev”, “Home” and “End” button to display the data log.



Data Log Viewer

Port: **COM1** Device: **ON-LINE**

DATE	TIME	IN-V	OUT-V	+BATT-V	IN-F	OUT-F	LOAD	TEMP	DELETE
2009/03/27	08:41:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:42:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:43:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:44:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:45:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:46:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:47:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:48:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:49:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:50:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:51:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:52:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:53:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:54:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:55:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>

Record No: 1 - 15 of 60

Next **Prev** **Home** **End** **Delete** **Purge All** **Close**

Diagram 3-2-5

User can select the check box “Delete” and click "Delete" button to remove the selected data log.

User can click “Close” button to close the dialog.

User can click "Purge All" button to delete all of the data.

Note: If “Delete” and "Purge All" button are invalid, it means your access right to the current Agent is “Read Only” and you can’t carry out these operations. You should log in as a super user.

6) “Record Setting” Dialog

The “Record Setting” dialog can be opened from the “Record Setting” item of “Logs” menu. Refer to the following Diagram 3-2-6-1.

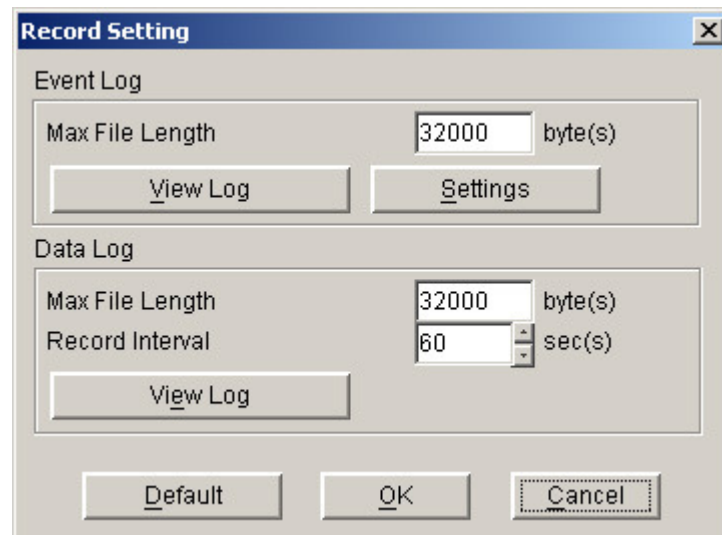


Diagram 3-2-6-1

The default value of the maximum file length of Event Log Viewer is 32KB (the maximum value is 1MB).

Click the “View Log” button of the event log in the “Record Setting” dialog (Refer to the following diagram 3-2-6-2) to pop up the “Event Log Viewer” dialog (Refer to the following diagram 3-2-6-3)

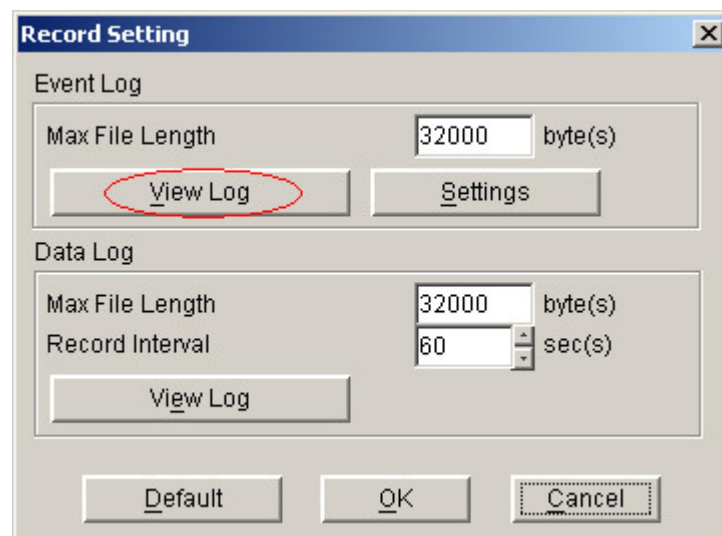


Diagram 3-2-6-2

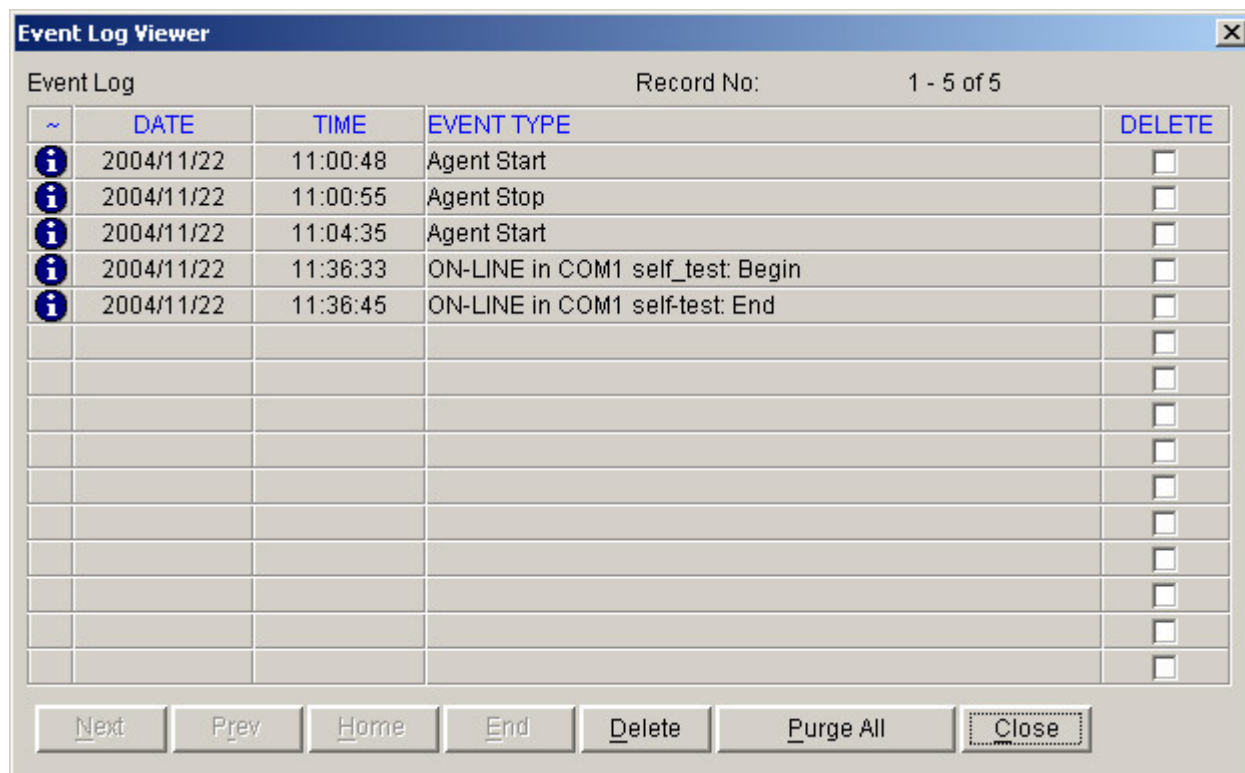


Diagram 3-2-6-3

Click the “Settings” button of the event log in the “Record Setting” dialog (Refer to the following diagram 3-2-6-4) to pop up the “Event Action” dialog. Refer to the following diagram 3-2-6-5.

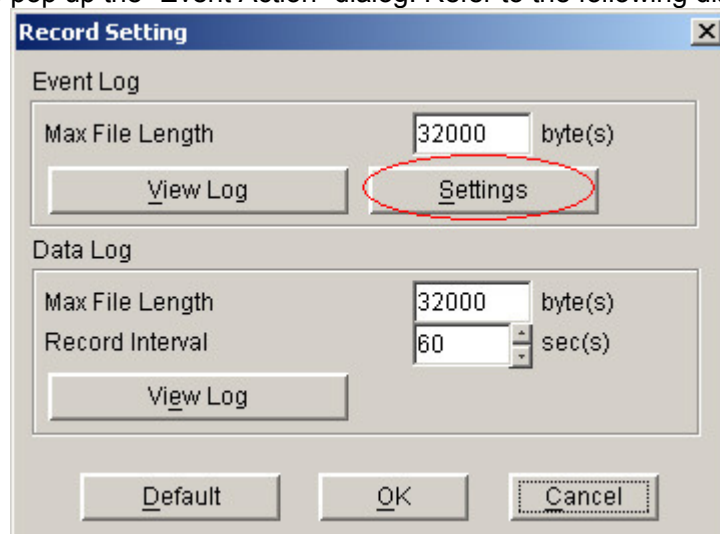


Diagram 3-2-6-4

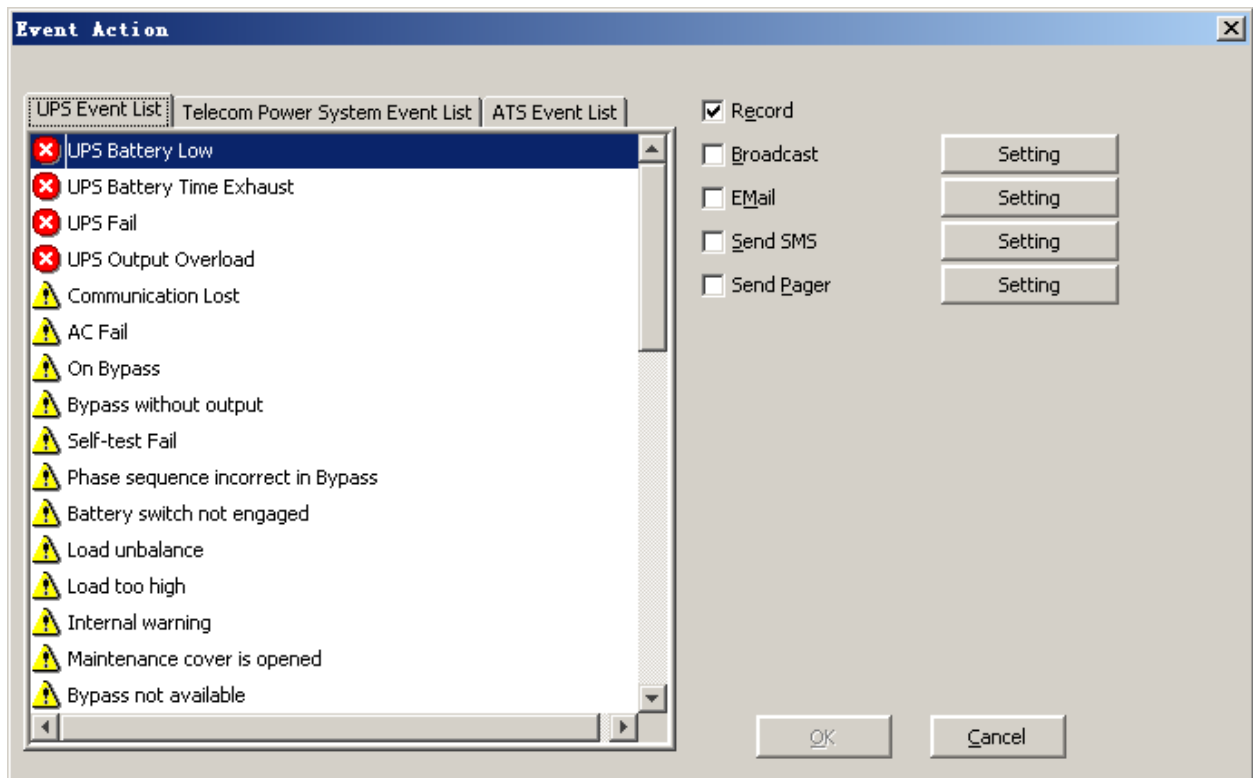


Diagram 3-2-6-5

The default value of the “Maximum file length” in the “Data Log Viewer” is 32KB (the maximum is 1MB).

The default value of record interval in the “Data Log Viewer” is 60 second (the maximum is 3600 second).

Click the “View Log” button of data log in the “Record Setting” dialog (refer to the following diagram 3-3-5-6) to pop up the “Data Log Viewer” dialog (refer to the following diagram 3-2-6-7).

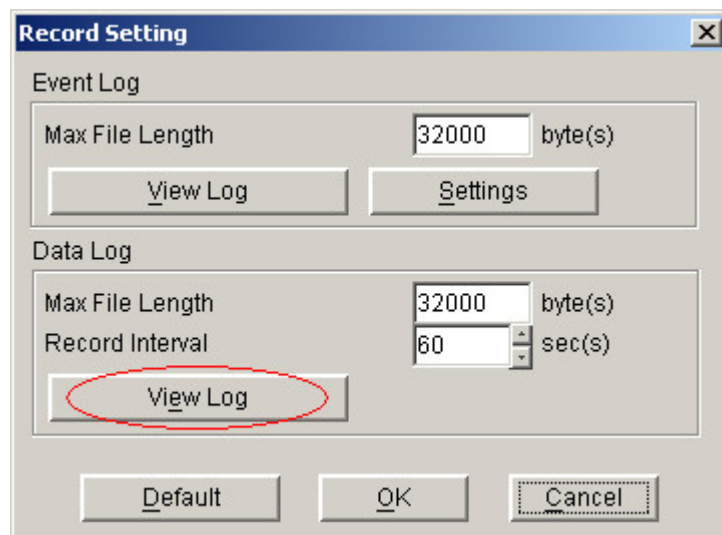


Diagram 3-2-6-6

Data Log Viewer ✕

Port: COM1 Device: ON-LINE

DATE	TIME	IN-V	OUT-V	+BATT-V	IN-F	OUT-F	LOAD	TEMP	DELETE
2009/03/27	08:41:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:42:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:43:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:44:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:45:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:46:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:47:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:48:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:49:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:50:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:51:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:52:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:53:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:54:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>
2009/03/27	08:55:54	220	220	41.0	50.0	--	80	45	<input type="checkbox"/>

Record No: 1 - 15 of 60

Diagram 3-2-6-7

Note: Click "Default" button and the parameters in this page will become default. If the "OK" button is invalid, it means your access right to the current Agent is "Read Only", and you cannot setup the parameters. You should log in as a super user.

7) " Device Control Parameters" Dialog

The "Device Control Parameters" Dialog will pop up when user selects "Device Control Parameters" item of "Device" menu.

For **ON-LINE** Device, refer to the following diagram 3-2-7-1.

UPS Control Parameters

Input Frequency Range	Low Limit(40.0 -- 49.0)	46.0	Hz
	High Limit(51.0 -- 60.0)	54.0	Hz
Voltage Range on Bypass	Low Limit(80 -- 219)	80	V
	High Limit(221 -- 286)	264	V

Panel Control

Allow OFF-Key to Enable/Disable Audible	<input checked="" type="radio"/> Yes <input type="radio"/> No
Warning When UPS Works on Bypass	
Allow ON-Key to Enable/Disable Audible	<input checked="" type="radio"/> Yes <input type="radio"/> No
Warning When UPS Works on Battery Mode	

Audible Warning

Bypass Audible Warning	<input checked="" type="radio"/> On <input type="radio"/> Silent
Battery Mode Audible Warning	<input checked="" type="radio"/> On <input type="radio"/> Silent

Operation Option

Work On Bypass When UPS Turned Off	<input checked="" type="radio"/> Yes <input type="radio"/> No
Auto Reboot UPS When AC Input Restored	<input checked="" type="radio"/> Yes <input type="radio"/> No

Default OK Cancel

Diagram 3-2-7-1

Refer to the following table 3-2-7-1:

Parameter	Unit	Maximum	Minimum	Default
High limit of input frequency on bypass	Hz	60.0 (for 50Hz system) 70.0 (for 60Hz system)	51.0 (for 50Hz system) 61.0 (for 60Hz system)	54.0 (for 50Hz system) 64.0 (for 60Hz system)
Low limit of input frequency on bypass	Hz	49.0 (for 50Hz system) 59.0 (for 60Hz system)	40.0 (for 50Hz system) 50.0 (for 60Hz system)	46.0 (for 50Hz system) 56.0 (for 60Hz system)
High limit of input voltage on bypass	V	286 (for 1~3K 220V UPS) 132 (for 1~3K 110V UPS) 261 (for 6~20K UPS)	221 (for 1~3K 220V UPS) 110 (for 1~3K 110V UPS) 231 (for 6~20K UPS)	264 (for 1~3K 220V UPS) 132 (for 1~3K 110V UPS) 261 (for 6~20K UPS)
Low limit of input voltage on bypass	V	219 (for 1~3K 220V UPS) 110 (for 1~3K 110V UPS) 209 (for 6~20K UPS)	80 (for 1~3K 220V UPS) 40 (for 1~3K 110V UPS) 140 (for 6~20K UPS)	80 (for 1~3K 220V UPS) 50 (for 1~3K 110V UPS) 176 (for 6~20K UPS)
ON button can control battery mode audible warning	-	-	-	Yes
OFF button can control bypass mode audible warning	-	-	-	Yes (for 1~3K UPS) No (for 6~20K UPS)
Do audible warning when on bypass mode	-	-	-	Yes
Do audible warning when on battery mode	-	-	-	Yes
Restore line mode when AC restored	-	-	-	Yes
Work on bypass when UPS turned off	-	-	-	No (for 1~3K UPS) Yes (for 6~20K UPS)

Table 3-2-7-1

For special ON-LINE Device, refer to the following diagram 3-2-7-2.

UPS Control Parameters

Bypass Frequency Range	Low Limit (40.0-49.0)	46.5	Hz
	High Limit (51.0-60.0)	55.5	Hz
Bypass Voltage Range	Low Limit (110-124)	120	V
	High Limit (130-276)	134	V
Input Frequency Range	Low Limit (2%-10%)	4	
	High Limit (2%-10%)	2	
ECO Frequency Range	Low Limit (5%-10%)	5	
	High Limit (5%-10%)	6	
ECO Voltage Range	Low Limit (5%-10%)	8	
	High Limit (5%-10%)	7	
Rated Output Voltage		200	V
Voltage Adjustment		+0.5	V
Rated Output Frequency		50	Hz
Maximum Charging Current		3.0	A
Battery Quantity Per String		15	
Panel Control			
Allow Button to Enable/Disable Audible Warning			<input type="radio"/> Yes <input checked="" type="radio"/> No
Operation Option			
Bypass Forbidden			<input type="radio"/> Yes <input type="radio"/> No
Auto Reboot UPS When AC Input Restored			<input checked="" type="radio"/> Yes <input type="radio"/> No
Buzzer Alarm			<input checked="" type="radio"/> Yes <input type="radio"/> No
Converter Mode			<input checked="" type="radio"/> Yes <input type="radio"/> No
ECO Mode			<input type="radio"/> Yes <input type="radio"/> No
Parallel Function			<input type="radio"/> Yes <input checked="" type="radio"/> No
Auto Frequency Detection			<input type="radio"/> Yes <input checked="" type="radio"/> No
Auto Recover from Overload			<input type="radio"/> Yes <input checked="" type="radio"/> No
Auto Short-Circuit Clearance			<input type="radio"/> Yes <input checked="" type="radio"/> No
Deep Discharge function			<input checked="" type="radio"/> Yes <input type="radio"/> No
EPO Function			<input checked="" type="radio"/> Yes <input type="radio"/> No
Load Segment			<input type="radio"/> Yes <input checked="" type="radio"/> No
Bypass when UPS is Off			<input type="radio"/> Yes <input checked="" type="radio"/> No
Default		Cancel	OK

Diagram 3-2-7-2

Refer to the following table 3-2-7-2.

Parameter	Unit	Maximum	Minimum	Default
High limit of input frequency on bypass	HZ	60.0 (for 50Hz system) 70.0 (for 60Hz system)	51.0 (for 50Hz system) 61.0 (for 60Hz system)	55.0 (for 50Hz system) 66.0 (for 60Hz system)
Low limit of input frequency on bypass	HZ	49.0 (for 50Hz system) 59.0 (for	40.0 (for 50Hz system) 50.0 (for	45.0 (for 50Hz system) 54.0 (for 60Hz system)

		60Hz system)	60Hz system)	
High limit of input voltage on bypass	V	276	Low limit of input voltage on bypass +10	264
Low limit of input voltage on bypass	V	High limit of input voltage on bypass - 10	110	110
High limit of input frequency on ECO	-	+10%	+5%	+5%
Low limit of input frequency on ECO	-	-10%	-5%	-5%
High limit of input voltage on ECO	-	+10%	+5%	+5%
Low limit of input voltage on ECO	-	-10%	-5%	-5%
High limit of input frequency on Line	-	+10%	+2%	+10%
Low limit of input frequency on Line	-	-10%	-2%	-10%
Output voltage rating	V	240	200	220V(Can be 200V,208V,220V,230V,240V,can be set in no output or bypass mode)
Voltage adjustability	-	+10	-10	0
Output frequency rating	HZ	60	50	50(Can be 50 or 60, can be set in no output mode or bypass mode)
Battery Quantity Per String	-	24 or 20(depending on the UPS model)	12	20(only for 6-10k)
Maximum charging current	A	4 or 1(depending on the UPS model)	0.5	4 or 1(depending on the UPS model, only for 6-10k ups)
Allow button to enable/disable audible warning	-	-	-	No
Bypass Forbidden	-	-	-	No
UPS Auto Restart				
Buzzer Alarm	-	-	-	Yes
Converter Mode	-	-	-	No
ECO Mode	-	-	-	No
Parallel Mode	-	-	-	No
Frequency Auto Detection	-	-	-	Yes
Auto Re-transfer After Overload Clearance	-	-	-	Yes
Auto Short-Circuit Clearance				Yes
EPO Function				Yes
Load Segment				Yes (for 1-3K UPS)
Bypass when UPS is off				Yes
Deep Discharge Function				No

Table 3-2-7-2

Note: click the “default” button, the parameters in this page will become the default value.

For regular LINE-INT UPS, user can enable/disable battery mode alarm audible though this dialog. Refer to the following diagram 3-2-7-3:

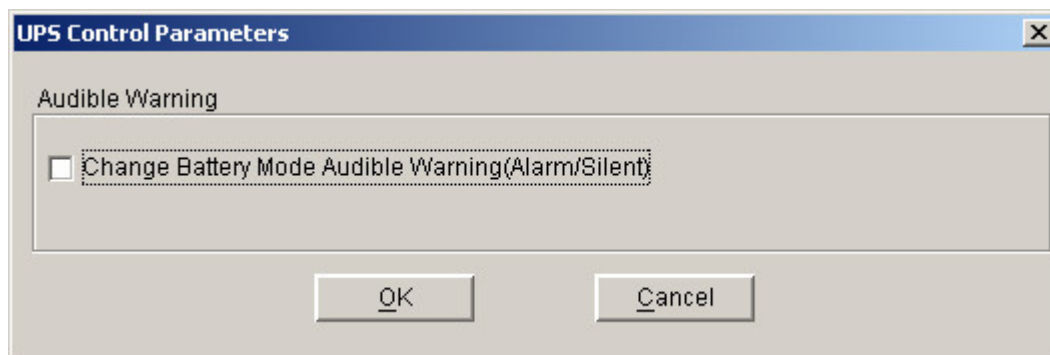


Diagram 3-2-7-3

For special LINE-INT UPS, Refer to the following diagram 3-2-7-4.

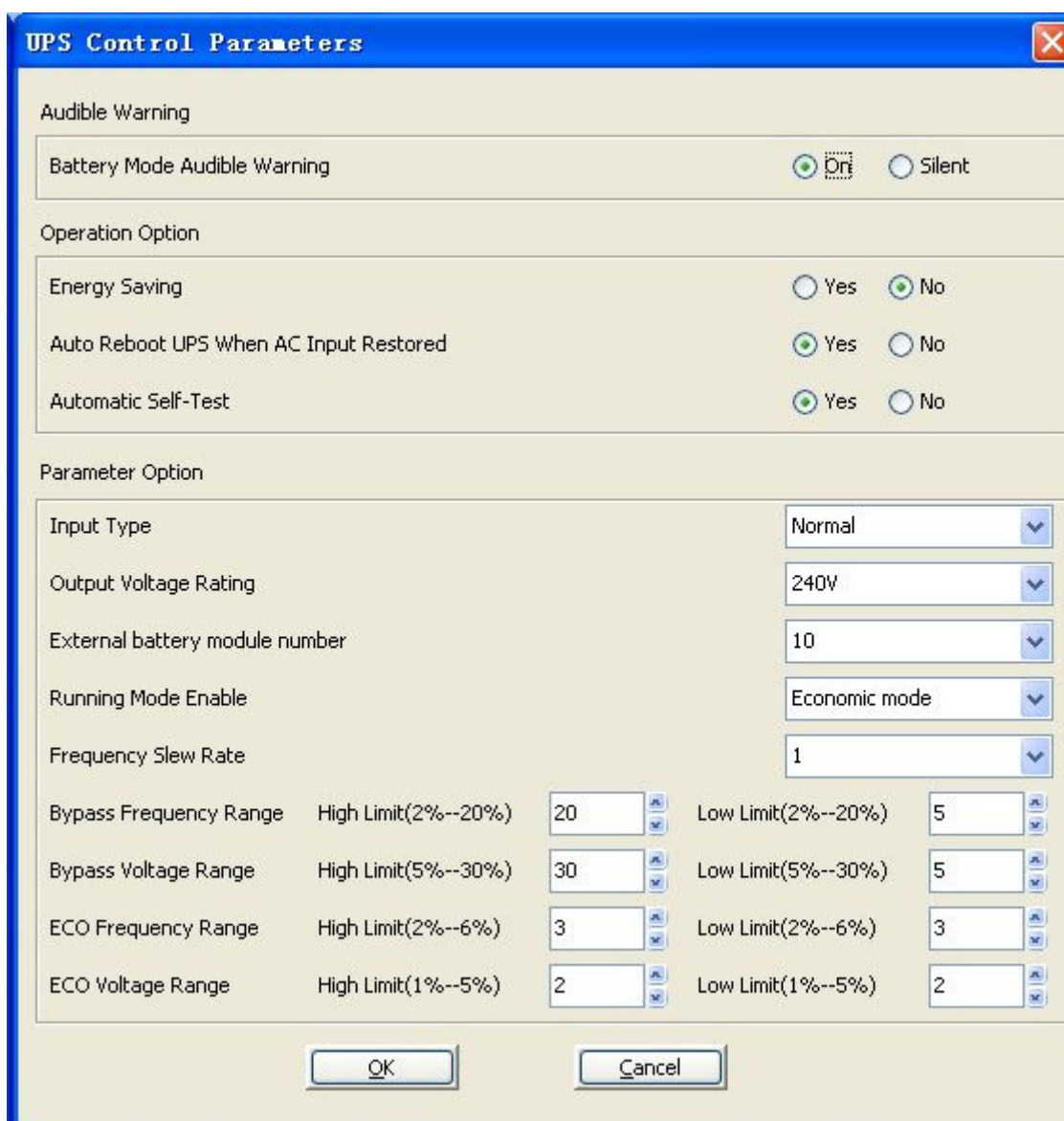


Diagram 3-2-7-4

Refer to the following table 3-2-7-3

Parameter	Value
Battery Mode Audible Warning	Yes – Allow audible warning in battery mode No – Keep silence in battery mode
Energy Saving	Yes – If the load is light, Shut down UPS in 5 minutes when AC Fail No – UPS won't be shut down until battery backup time exhaust
Auto Reboot UPS When AC Input Restored	Yes – Auto-restart enable No – Auto-restart disable
Automatic Self-Test	Yes – Automatic self-test enable No – Automatic self-test disable
Input Type	Normal – Accept normal AC line range Wide range – Accept wide AC line range Generator – Accept generator's output
Output Voltage Rating	Can be 110V,120V,127V,220V,230V,240V
External battery module number	Only long time discharged model has this option, the number is from 00 to 10.
Running mode enable(only for vigor)	Economic mode – enable economic mode Normal – disable economic mode
Frequency slew rate(only for vigor)	Can be 1,2,3
Bypass frequency range, Bypass voltage range, ECO frequency range, ECO voltage range(only for vigor)	High loss limit and low loss limit

Table 3-2-7-3

For special LINE-INT UPS, Refer to the following diagram 3-2-7-5.

UPS Control Parameters

Audible Warning

Battery Mode Audible Warning ☒ On ☐ Silent

Operation Option

Energy Saving ☒ Yes ☐ No

Auto Reboot UPS When AC Input Restored ☒ Yes ☐ No

Automatic Self-Test ☒ Yes ☐ No

Parameter Option

Input Type Normal

Output Voltage Rating 220V

External battery module number 1

OK Cancel

Diagram 3-2-7-5

Refer to the following table 3-2-7-4.

Parameter	Value
Battery Mode Audible Warning	Yes – Allow audible warning in battery mode No – Keep silence in battery mode
Energy Saving	Yes – If the load is light, Shut down UPS in 5 minutes when AC Fail No – UPS won't be shut down until battery backup time exhaust
Auto Reboot UPS When AC Input Restored	Yes – Auto-restart enable No – Auto-restart disable
Automatic Self-Test	Yes – Automatic self-test enable No – Automatic self-test disable
Input Type	Normal – Accept normal AC line range Wide range – Accept wide AC line range Generator – Accept generator's output
Output Voltage Rating	Can be 110V,120V,127V,220V,230V,240V
External battery module number	Only long time discharged model has this option, the number is from 00 to 10.

Table 3-2-7-4

For telecom power, Refer to the following diagram 3-2-7-6

Telecom Power System Control Parameter Setting			
System Settings			
<input type="checkbox"/> Baud Rate	2400	<input type="checkbox"/> R422 Address (0--9999)	0
Inverter Settings			
<input type="checkbox"/> O/P Volt	230V	<input type="checkbox"/> O/P Freq	60Hz
<input type="checkbox"/> Output Volt Low Loss (176--...	220 V	<input type="checkbox"/> Output Volt High Loss (233-...	220 V
<input type="checkbox"/> Input Volt LVSD (36.0V--46.0V)	42.0 V	<input type="checkbox"/> Power Limited (50%--100%)	100 %
<input type="checkbox"/> Fan Speed	Normal	<input type="checkbox"/> Inverter On/Off	All <input type="radio"/> On <input checked="" type="radio"/> Off
STS Settings			
<input type="checkbox"/> AC Volt Low Loss (176--209)	220 V	<input type="checkbox"/> AC Volt High Loss (233--252)	220 V
<input type="checkbox"/> Inv. IPV Low Loss (176--209)	110 V	<input type="checkbox"/> Inv. IPV High Loss (233--252)	110 V
<input type="checkbox"/> Fan Speed	Normal	<input type="checkbox"/> Output Priority	<input type="radio"/> On Line <input checked="" type="radio"/> Off Line
Rectifier Settings			
<input type="checkbox"/> Output voltage	54.0 V	<input type="checkbox"/> Output voltage limit	59 V
<input type="checkbox"/> Current limit	100 %	<input type="checkbox"/> Restart time	10 S
<input type="checkbox"/> Fan Speed	Normal	<input type="checkbox"/> Rectifier On/Off	All <input type="radio"/> On <input checked="" type="radio"/> Off
Notice: Please don't execute settings when readdressing; Restart TPS after setting output voltage of Inverter			
OK		Cancel	

Diagram 3-2-7-6

For ATS, Refer to the following diagram 3-2-7-7

The image shows a software dialog box titled "ATS Parameter Settings". It contains several configuration options, each with a checkbox and a corresponding dropdown menu. The options are:

- ☐ Buzzer Status: Enable
- ☐ Preferred Source: 2
- ☐ Synchronization Value: 10
- ☐ Delay Transfer Time on Asynchronous: No Delay
- ☐ Input Voltage Acceptable Range: 20
- ☐ Input Frequency Acceptable Range: 10
- ☐ Nominal Voltage: 220

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

Diagram 3-2-7-7

Refer to the following table 3-2-7-5.

Parameter	Value
Buzzer Status	can be Enable, Mute, Disable
Preferred Source	1 - The Preferred source is S1 2 - The Preferred source is S2
Synchronization Value	The value can be 10,15,20. If the phase difference between S1 and S2 is less than this value degree, ATS will regard two input sources as synchronous source
Delay Transfer Time on Asynchronous	The value can be No delay, half cycle and one cycle. When switching input source due to preferred source fail if two input sources are not synchronous, the ATS will add a period of delay time.
Input Voltage Acceptable Range	The value can be between 12 and 20. for example ,the range of input voltage window is +/-12% if this value is 12
Input Frequency Acceptable Range	The value can be between 5 and 15. for example ,the range of input frequency window is +/-15% if this value is 15
Nominal Voltage	The value can be 220,230 and 240. This is only available for HV system

Table 3-2-7-5

Note: If the "OK" buttons is invalid, it means that your access right to the current Agent is "read only" and you can't carry out setup. You should log in as a super user.

8) "Event Action" Dialog

The "Event Action" dialog can be opened, by clicking "Event Action" item of "Device" menu or button in the toolbar. Refer to the following diagram 3-2-8. In the "Event Action" dialog, users can select that which action will be carried out when some events occur. For each event, the actions that users can select are Record, Broadcast, Email, Send SMS and Send Pager. There are three kinds of events, The UPS event list is for UPS, Telecom Power System event list for Telecom Power System and ATS Event List for ATS.

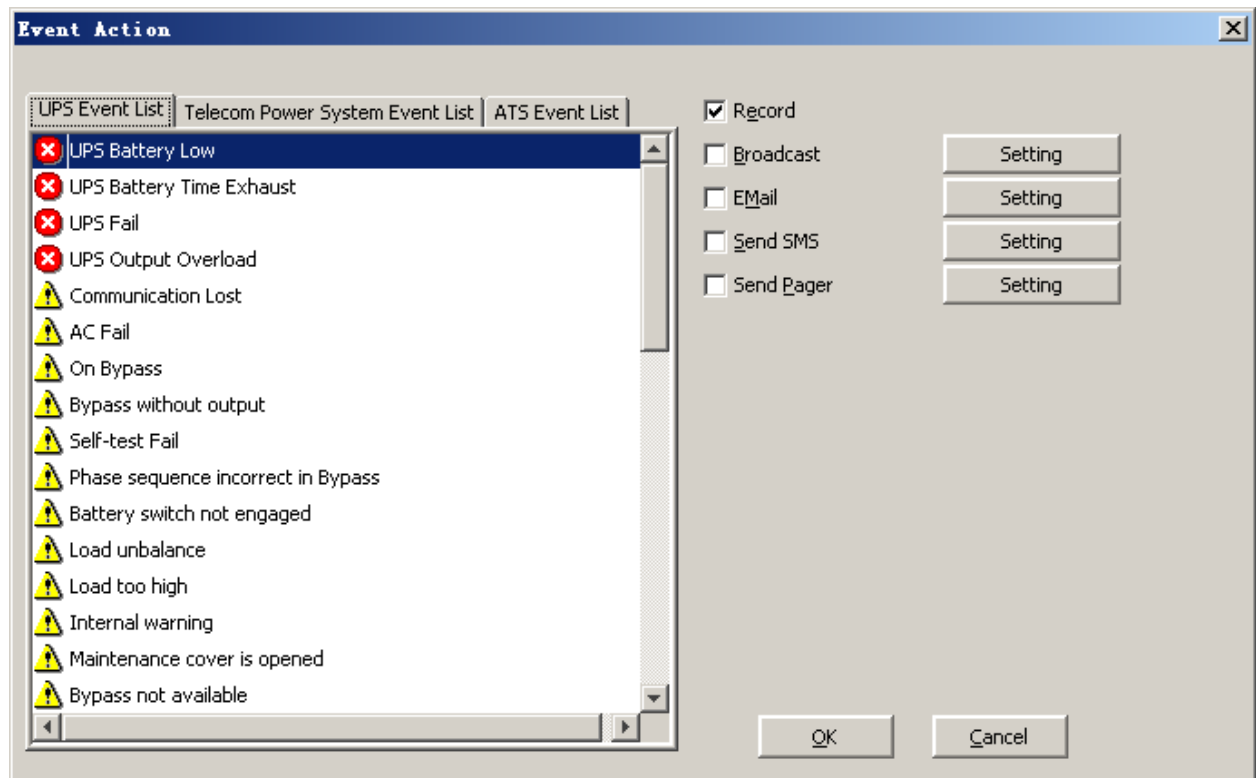


Diagram 3-2-8

Three grades icon of event: Severity (red), Warning (yellow) and Message (blue).

Note: if you want to use the e-mail notification function, you must setup SMTP server first. For the detailed information, please refer to "How to realize sending event message by e-mail".

9) "Shutdown Settings" Dialog

The "Shutdown settings" dialog can be opened from the "Shutdown Parameter" item of the "Device" menu. Refer to the following diagram 3-2-9.

Shutdown Settings

Shutdown Options

COM3 ON-LINE

☐ Battery Backup Time 10 min

☒ Begin Shutdown Immediately when Battery Low

☒ System ☒ Shutdown ☐ Suspend ☐ Multi-UPS input

System shutdown time 2 min

☐ Remote Shutdown by Agent 0 min shutdown system

☐ Run Command File before Shutdown Browse..

Shutdown File Max Execution Time 1 min

Shutdown Remote Agents

Shutdown Conditions	Agent will be shutdown

Add Modify Remove

Shutdown Alarm Parameters

Shutdown Alarm Interval 1 min

Start Warning before Scheduled Shutdown 10 min

OK Cancel

Diagram 3-2-9

The function is only for UPS.

In the “Shutdown Settings” dialog, the setting parameters are shown in the following Table 3-2-9.

Parameter	Unit	Maximum Value	Minimum Value	Default	Remark
Battery backup time	Minute	4320	1	10	When the check box with the function is selected and the utility power fails, , the software will send the shutdown command to UPS once the setting time is expired , and the output of UPS will be turned off
Shutdown System	—	—	—	No	When this check box is selected, System will be shutdown while the appointed UPS is being turn off.
Suspend System	—	—	—	No	When this radio box is selected, System will be

					suspended to disk in shutdown sequence. This function only can be carry out in some Windows platforms and hibernate support must be enabled from /Control Panel/Power Options/Hibernate .
Multi-UPS input	—	—	—	NO	When the check box is selected, system won't be shut down until all the conditions of all selected UPS are met.
System shutdown need time	Minute	99	1	2	The time to be needed to shutdown the system, which is from the beginning of shutting down to the end of that.
Remote Shutdown by Agent	—	—	—	No	If Yes, System will be shut down by specified Agent.
XX min shutdown system	Minute	4320	0	0	Receiving the specified agent's shutdown signal, delay XX minutes. System will be shut down.
Run Command File before Shutdown	—	—	—	Nothing	Before system shutting down, Agent can execute a file, if this parameter isn't null, Agent will not begin to shut down the system until the "Execution file before system shutting down" ends.
Shutdown File Max Execution Time	Minute	60	1	1	Before system shutting down, the time to be needed to execute the shutdown file.
Begin Shutting down immediately while battery low	—	—	—	Yes	When this check box is selected and battery low event occurs, Agent will shut down the UPS immediately, otherwise the shutting down time will be controlled by battery back up time.
Shutdown remote Agents' Conditions	—	—	—	—	The condition can be "UPS be shutdown" or "The time on battery exceed setting time".
Agents be Shutdown	—	—	—	—	When shutdown condition is satisfied, Agent will send shutdown signal to the appointed remote Agents.
Shutdown Alarm Interval	Minute	60	1	1	The interval that Agent pop up an alarm message before shutting down.
Start Warning before Scheduled	Minute	60	1	10	If user has setup schedule shutting down, AGENT will sound alarm prior to the set time.

Shutdown					
----------	--	--	--	--	--

Table 3-2-9

Note: If the “OK” button is invalid, it means that your access right to the current Agent is “Read Only”, you can’t setup the parameters. You should log in as a super user.

10) "UPS Self-Test Immediately" Dialog

The “UPS Self-Test Immediately” dialog can be opened from the “Battery Self-Test Now” item of “Device” menu. Refer to the following diagram 3-2-10.

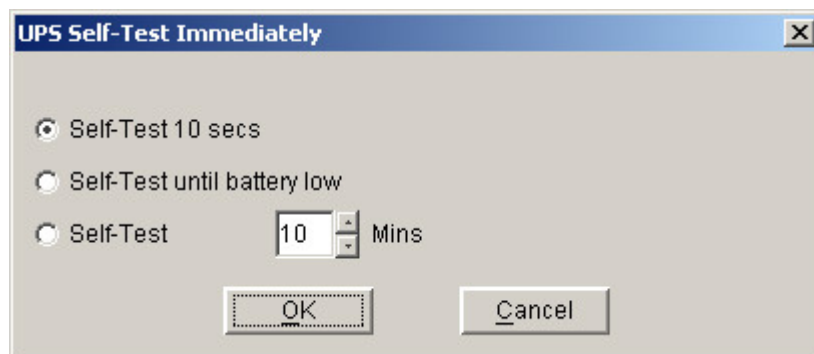


Diagram 3-2-10

The function is only for UPS.

In the “UPS Self-Test Immediately” dialog, users can select the type of self test: Self-Test for 10 seconds, Self-Test until battery low, Self-Test for XX minutes. The time range of self test for XX minutes is from 1 to 99 minutes.

Note: If the “OK” button is invalid, it means that your access right to the current Agent is “Read Only”, you can’t carry out the operation. You should log in as a super user.

11) "UPS Test Manager" Dialog

The “UPS Test Manager” dialog can be opened from the “Battery Self-Test Schedule” item of “Device” menu. Refer to the following diagram 3-2-11.

UPS Test Manager

November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22 •	23	24	25	26	27
28	29	30				

OK
Cancel

Symbol

- UPS Power Off
- UPS Power On
- UPS Test

Task List

Type	Date	Start Time	Operate	Delay Time	Operated UPS
Once	2004/11/22	13:08:39	Self-Test	Self-Test 10 secs	ON-LINE in COM1

Add Test Modify Remove

Diagram 3-2-11

The function is only for UPS.

The function can be used to display and setup UPS self test task. UPS self test task has two types: "once" and "monthly".

UPS self test type: UPS self test for 10 seconds, UPS self test to battery low, and UPS self test for the appointed time. The appointed time range is 1 to 99 minutes, and the default value is 10 minutes.

The "UPS Test Manager" dialog contains two parts: task list and calendar. All the UPS self test and UPS on/off tasks are shown in the calendar. The red dot denotes the Power Off action, the green dot denotes the Power On action and the blue dot denotes the self test action. Click the "Add Test" button and users can setup the special time and monthly UPS self test task in the popped up dialog. The self test task added will be shown in the schedule.

If you select one of the UPS self test tasks in the list, you can modify the task that has been set by clicking the "Modify" button. If you select one of the UPS self test tasks, you also can remove the task by clicking "Remove" button.

Note: If the "OK", "Add Test", "Modify" and "Remove" buttons are invalid, it means that your access right to the current Agent is "read only" and you can't carry out the setting. You should log in as a super user.

12) "UPS On/Off Manager" Dialog

The "UPS On/Off Manager" dialog can be opened from the "UPS On/Off Schedule" item of "Device" menu. Refer to the following diagram 3-2-12.

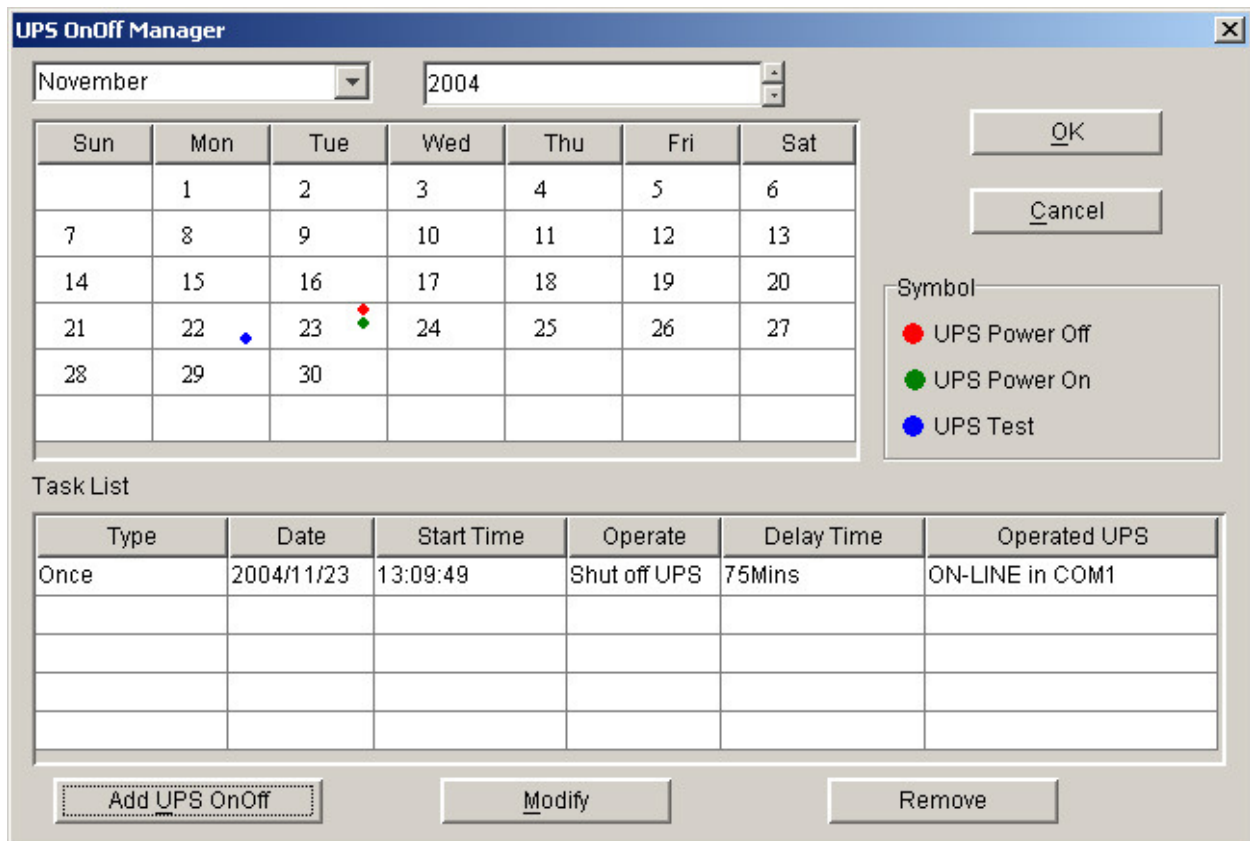


Diagram 3-2-12

The function is only for UPS.

The “UPS On/Off Manager” dialog is used to display and set up UPS On/Off tasks. The UPS On/Off tasks include two types: “Once” and “Weekly”. The UPS Power Off time range (from shutdown to turning on next time) that can be set is 1-9999 minutes, i.e. the longest power off time is 6 days 22 hours and 39 minutes. The input range for the year is 2002-2035. The “UPS On/Off Manager” dialog contains task list and calendar. All the UPS self test and UPS On/Off tasks are shown in the calendar. We use red dot to denote the Power Off action, green dot to denote the Power On action and blue dot to denote self test action in the calendar. Users can setup weekly and special time’s UPS Power On/Off tasks in the popped up dialog by clicking “Add UPS shutdown” button. Note: In terms of time, the new added task can’t conflict with the UPS self test task and UPS Power On/Off tasks that have been set. If you select one of the UPS self test tasks in the list, you can modify the setup task by clicking the “Modify” button. You also can remove the task by clicking “Remove” button.

Note: If the “OK”, “Add Test”, “Modify” and “Remove” buttons are invalid, it means that your access right to the current Agent is “read only” and you can’t carry out the setting. You should log in as a super user.

13) "Schedule Viewer" Dialog

The “Schedule Viewer” dialog can be opened from the “View Schedule” item of the “UPS” menu. Refer to the following diagram 3-2-13.

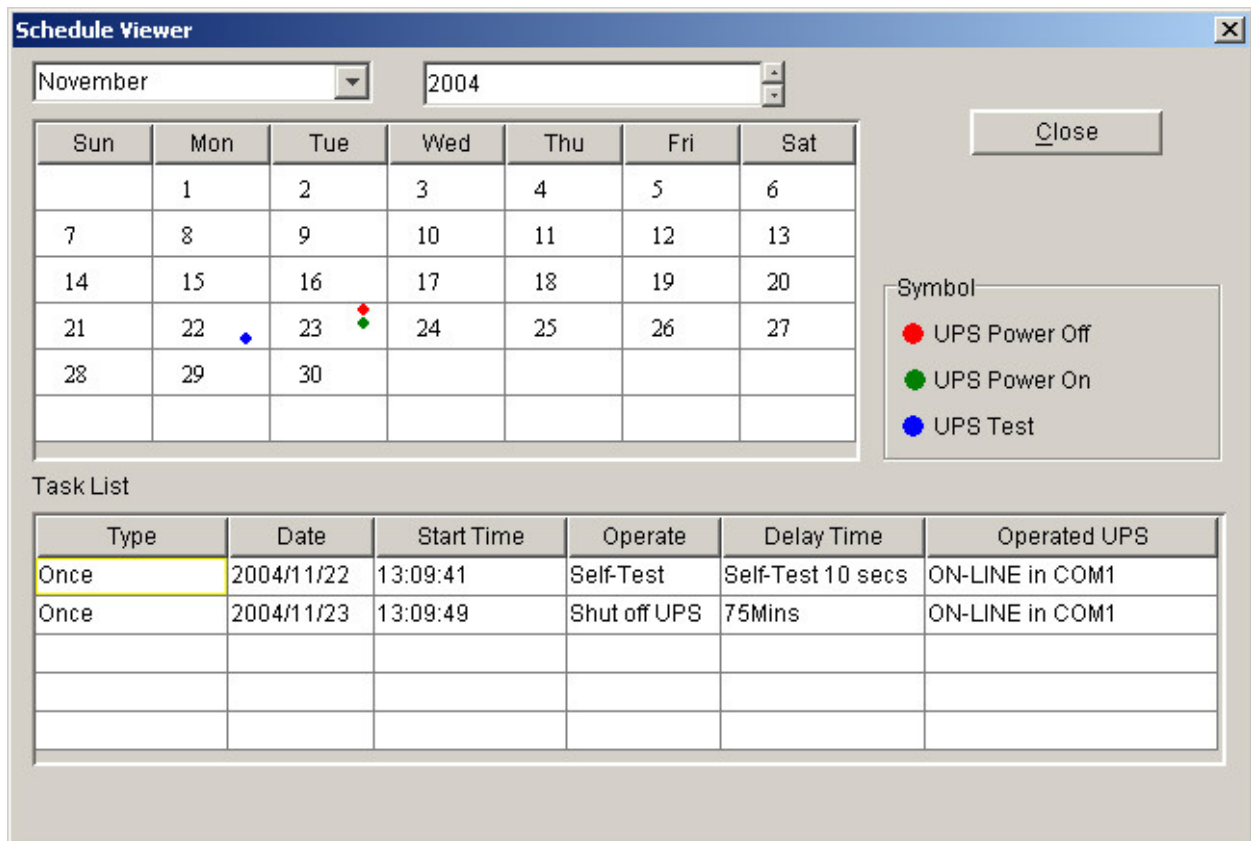


Diagram 3-2-13

The function is only for UPS.

The "Schedule Viewer" dialog is used to show the set up UPS Power On/Off and self test tasks. "Schedule" dialog contains task list and calendar graphic. Only the tasks of the current month are displayed in the task list. We use red dot to denote the Power Off action, green dot to denote the Power On action and blue dot to denote the self test action in the calendar.

14) "Broadcast Message Settings" Dialog

The "Broadcast Message Settings" dialog can be opened from the "Broadcast Setting" item of "Tools" menu or click broadcast "Setting" button in "Event Action" Dialog. Refer to the following diagram 3-2-14.

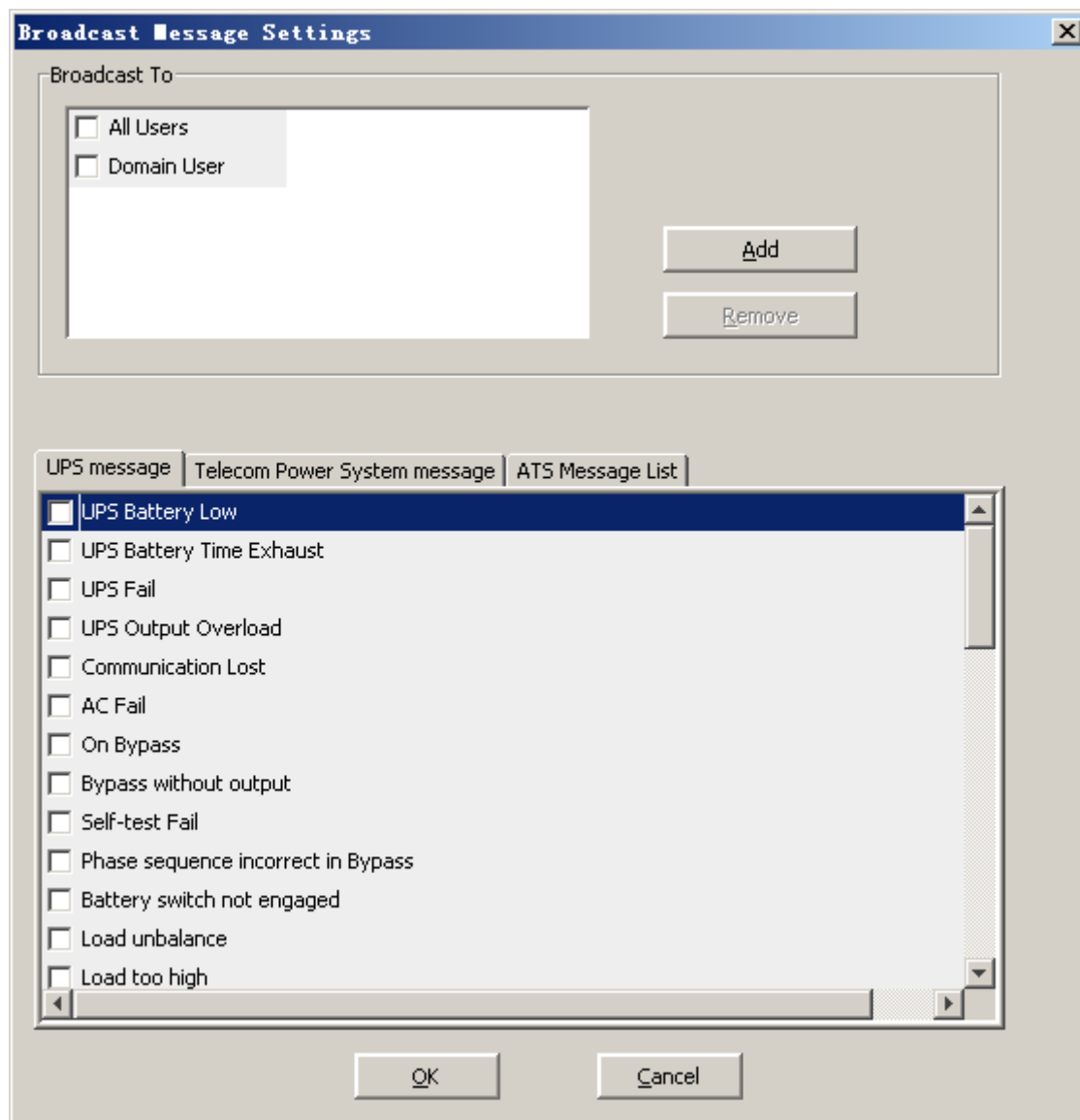


Diagram 3-2-14

The "Broadcast To" list box lists the users. The user item must be selected if the user wants to receive broadcast message. You can add and delete user item by click "Add" and "Remove" button (Note: the "All Users" and "Domain User" item can not be deleted). "All Users" means all computers in LAN. "Domain User" means computers in the same domain with local Agent.

The "UPS message", "Telecom Power System message" and "ATS message list" list boxes list all the message, you can select the message by click the check box with the message item.

Note: The function is valid only for windows. To receive broadcast message, "Winpopup" in Windows95/98 and "Messenger Service" in Windows NT/2000/XP must be started. If the "OK" button is invalid, it means that your access right to the current Agent is "Read only", and you can't carry out the operation. You should log in as a super user.

15) "Email Settings" Dialog

The "E-Mail Settings" dialog can be opened from the "E-Mail Setting" item of "Tools" menu or click E-Mail "Setting" button in "Event Action" Dialog. Refer to the following diagram 3-2-15.

Diagram 3-2-15

The included items of the email parameter setting are shown in the following Table 3-2-15.

SMTP Server Name	This is the mail server, which is used to send emails to the appointed users. It could accept two formats: IP address and host name. For example: smtp.163.com
SMTP Account Name	This is the account for logging in the server. Enter the complete address format here. For example: yyy@163.com
Password	Input the SMTP account password in needed

Table 3-2-15

The "Receiver E-Mail Address" list box lists the email addresses. Click "Add" button to add an email address item. Select an address item and click "Remove" button will delete the item. Selected an email address item, and click the "Test" button will send a test email to the email address.

The "UPS message", "Telecom Power System message" and "ATS message list" list boxes list all the message, you can select the message by click the check box with the message item.

All of the SMTP parameter's default value is vacancy, and it can be setup in the local Agent only. To send email to the appointed user, the SMTP server name or IP address must be set, or the email will not be sent successfully.

Note: If you want to send email via Internet, you must have a SMTP account in the Internet. If the "OK" button is invalid, it means that your access right to the current Agent is "read only", and you can't carry out the parameter setting. You should log in as a super user.

16) "SMS Setting" Dialog

The "SMS Setting" dialog can be opened from the "SMS Setting" item of "Tools" menu or click Send SMS "Setting" button in "Event Action" Dialog. Refer to the following diagram 3-2-16.

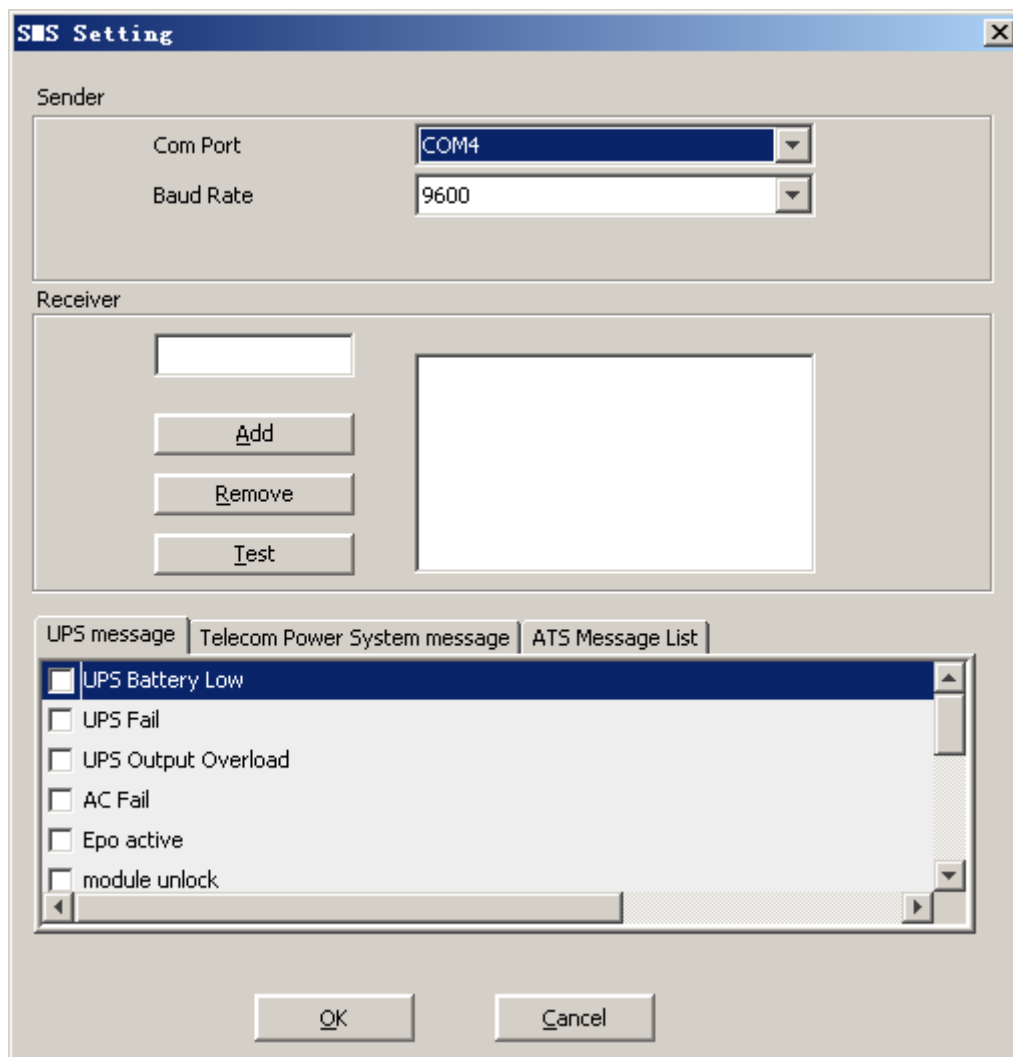


Diagram 3-2-16

Below is the use remark of SMS setting:

1. Sender

SMS is sent through GSM modem or mobile phone connected with your computer. User should select COM port that is being used by GSM Modem or mobile phone, and set baud Rate of the COM port.

2. Receiver:

Receiver is the mobile phones numbers who can receive the SMS. It can be one or more. If the Event that you have selected occurs, winpower will send the event message to the phone numbers in the "Receiver" list.

3. UPS message, Telecom Power System message and ATS message list

User can select the events that need to be informed by SMS.

Note: If the OK button is invalid, it means that your access right to the current Agent is "Read Only", and you can't carry out the operation. You should log in as a super user.

17) "Pager Setting" Dialog

The "Pager Setting" dialog can be opened from the "Pager Setting" item of "Tools" menu or click "Send Pager Setting" button in the "Event Setting" dialog. Refer to the following diagram 3-2-17.

Send	Event Code	Event Name
<input checked="" type="checkbox"/>	65	Battery voltage low
<input type="checkbox"/>	68	Battery voltage high
<input type="checkbox"/>	66	Controller temperature high
<input type="checkbox"/>	67	Controller EPROM fault
<input type="checkbox"/>	69	Controller CAN bus off
<input type="checkbox"/>	112	Communication lost
<input type="checkbox"/>	116	Communication restore
<input type="checkbox"/>	1	Inverter fault
<input type="checkbox"/>	2	Inverter over-loading

Diagram 3-2-17

To configure the pager parameters, user must have full access. User can get full access by selecting "Act as Administrator" item of "System" menu and enter right Agent Password in the popup dialog.

Refer to the following table 3-2-17.

Parameter	Description
Modem Port	Select COM port which is being used by Modem.
Access Number	For some pager service, a delay is needed between dialing access number and Pager Number.
Pager Number	For some pager service, a delay is needed between dialing pager number and message code.
Dialing number to exterior line	For extension line, it is always necessary to dial a specified number and delay a specified time to access Exterior Line.
Dialing number after message	For some pager service, need to dial a specified number to end message code.
Event Code	The event code is dialed as the message code and will be displayed on pager.

Table 3-2-17

Note: If the "OK" button is invalid, it means that your access right to the current Agent is "Read Only", and you can't carry out the operation. You should log in as a super user.

18) "Monitor Remote Device" Dialog

The "Monitor Remote Device" Dialog will show when user selects "Monitor Remote Device" item of "Monitor" menu. Refer to the following diagram 3-2-18-1.

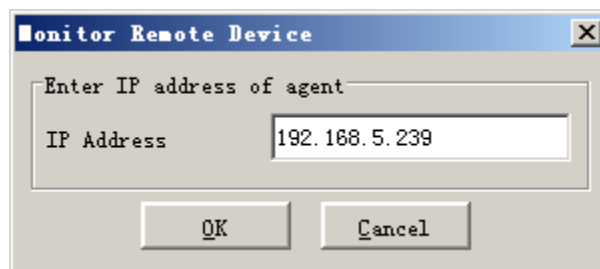


Diagram 3-2-18-1

Enter the IP address of an Agent to be monitored, and press "OK" button. If the agent exists, its information will be shown below the "WAN" node in the tree view of the Manager window.

Note:

- 1) The number of remote agent monitored is up to 32.
- 2) If the software can't communicate with the remote agent in 1 minute, the agent will be kept on the left tree, and the status of this agent will be "Network Communication Lost".
- 3) You can delete a remote agent by select the agent node manually, then click the mouse right button to show a pop up menu, select "Delete" menu item to remove it. Refer to the following diagram 3-2-18-2.

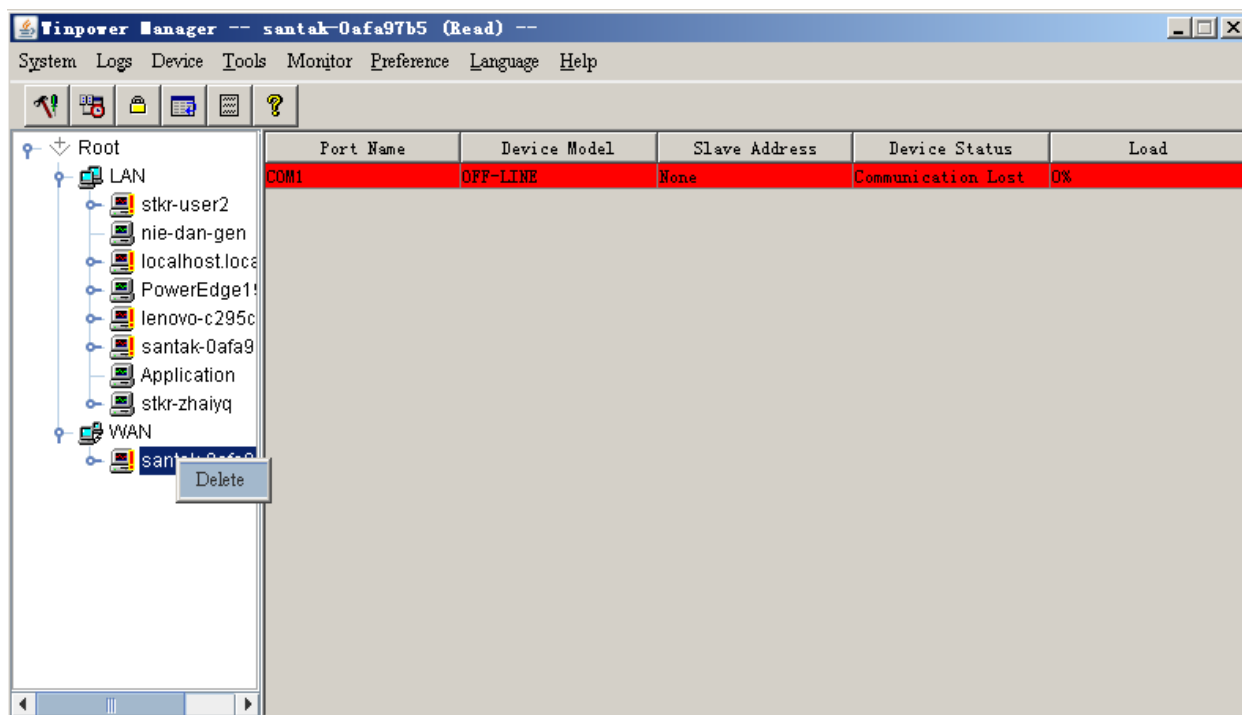


Diagram 3-2-18-2

19) Bottom image

If you select the submenu “BottomImage” of the menu “Preference”, you can change the bottom image of the interface. Refer to the following diagram 3-2-19.

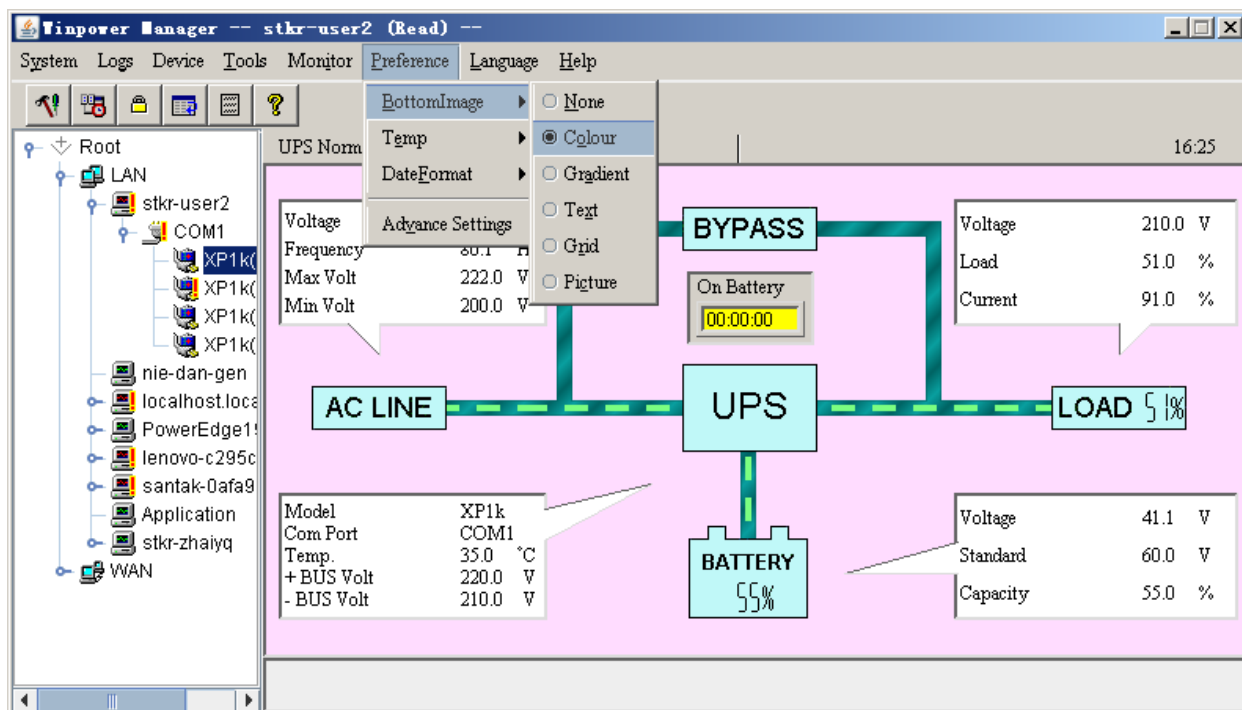


Diagram 3-2-19

20) Temp

The centigrade or Fahrenheit temperature shown in the interface can be changed by selecting the submenu “Temp” of the menu “Preference”. Refer to the following diagram 3-2-20.

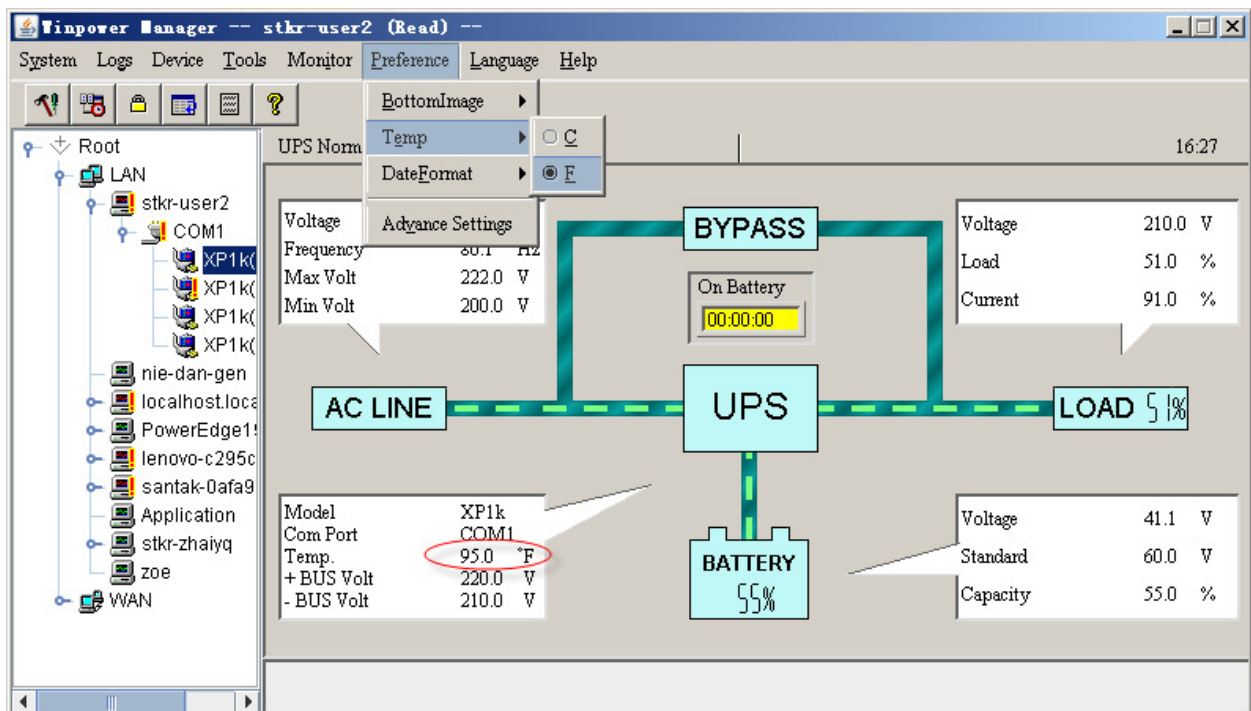


Diagram 3-2-20

21) Date Format

The date format can be changed by selecting the submenu “DateFormat” of the menu “Preference”. The format is “Year/Month/Day”, “Month/Day/Year” or “Day/Month/Year”. Refer to the following diagram 3-2-21.

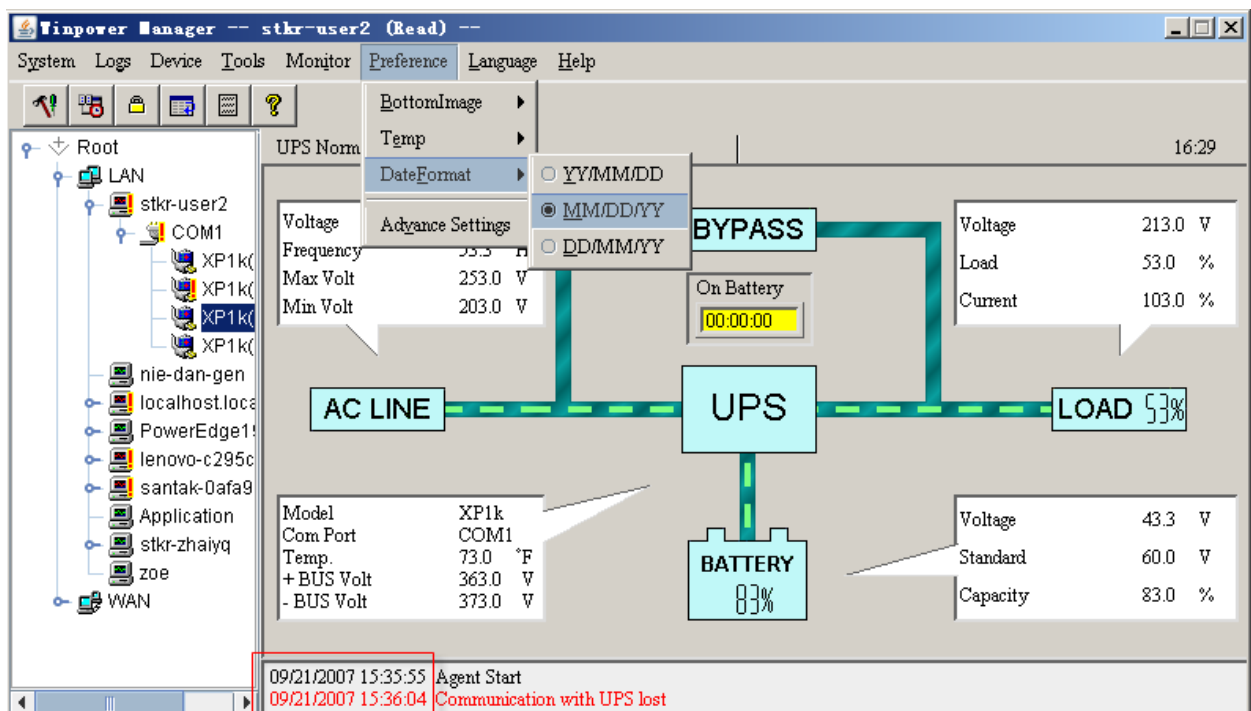


Diagram 3-2-21

22) Advance Settings

The font, size, color and bottom image of the interface can be changed by selecting the submenu “Advance Settings” of the menu “Preference”.

The “Advance Settings” dialog contains two parts: “General” and “BottomImage”.

Refer to the following diagram 3-2-22-1.

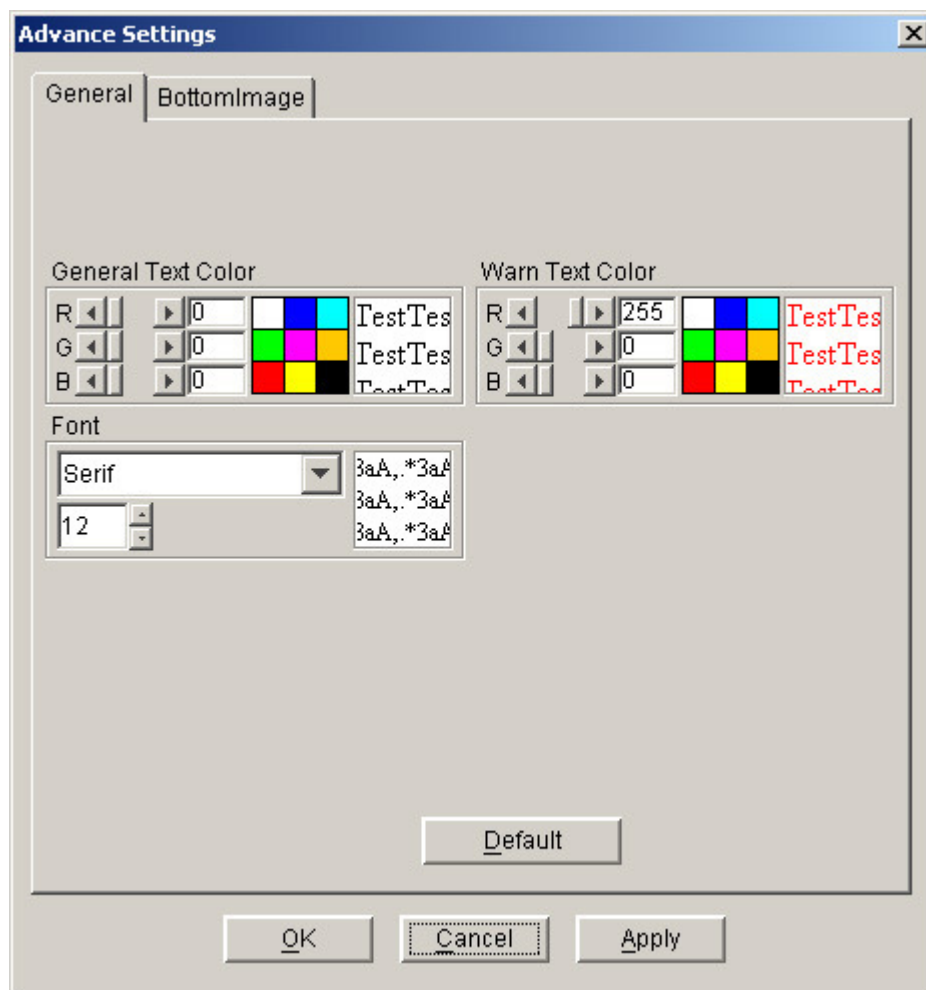


Diagram 3-2-22-1

Note: If you click “Default” button, the parameters in this view will be turned into default value.

If the “OK” button is invalid, it means that your access right to the current Agent is “read only”, so you can’t carry out the parameter setup. You should log in as a super user.

In the “BottomImage” view:

If you click “None” box, the bottom image of the interface is “background color”.

Users can select the color that they want by clicking “Color” box.

Users can select the color and gradient direction that they want by clicking “Gradient” box.

Users can select background color, character size and light and shade degree of background text by clicking “Text” box. The bottom image is the background that has the appointed text.

Users can select the background color, the grid offset, the grid size and the grid light and shade degree in the background by clicking “Grid” box, the bottom image of the interface is “Grid”.

Users can select the background picture from the popped up list box by clicking the “Picture” box, the bottom image of the interface is “Picture”.

Refer to the following diagram 3-2-22-2.

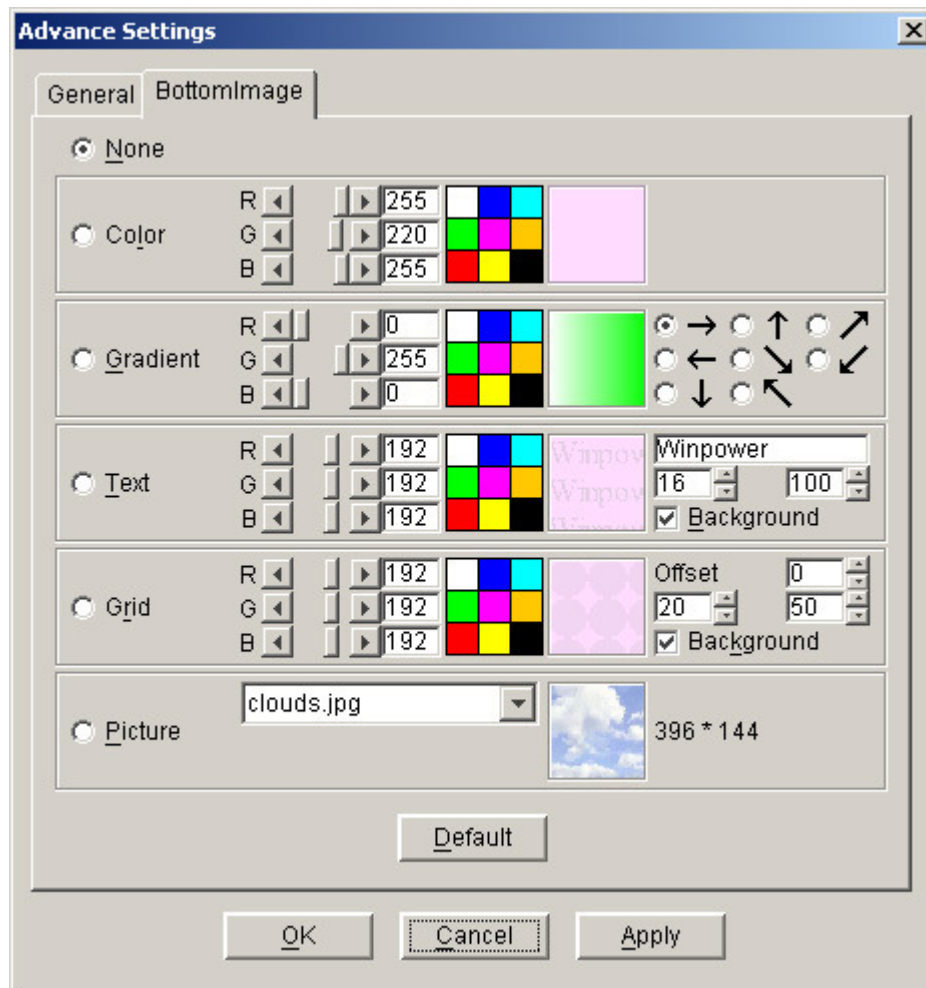


Diagram 3-2-22-2

Note: Click “Default” button, the parameters in this view will turn to default value. If the “OK” button is invalid, it means that your access right to the current Agent is “read only”, and you can’t carry out the parameter setup. You should log in as a super user.

23) Language menu

Users can select languages in the “Language” menu to display different languages, there are ten kinds of languages to be selected: “English” or “Russian”. Refer to the following diagram 3-2-23

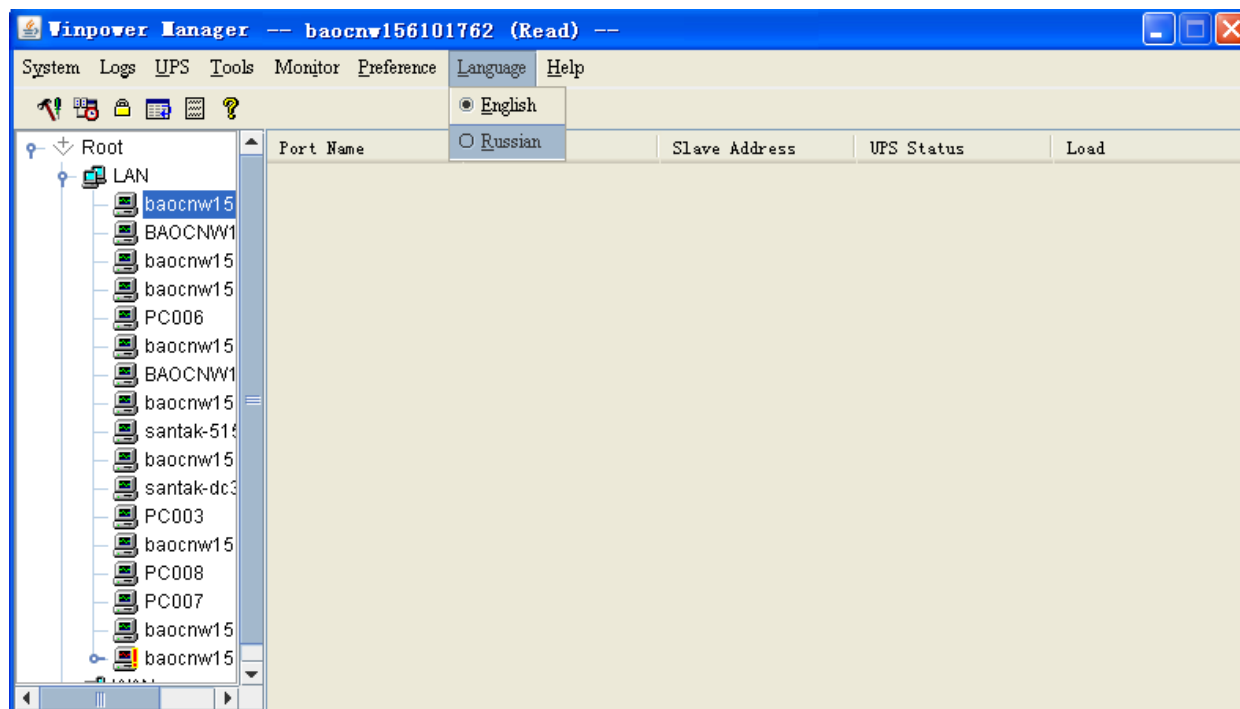


Diagram 3-2-23

24) "Communication Port Settings" Dialog

The "Communication Port Settings" dialog can be opened from the "COM Port Setting" item of "System" menu.

On Linux and UNIX, Winpower can't detect the serial port devices automatically. If the system has a Serial Port that can't be found in the default setting table, you must add it manually in the "Communication Port Settings" dialog. Refer to the following diagram 3-2-24.

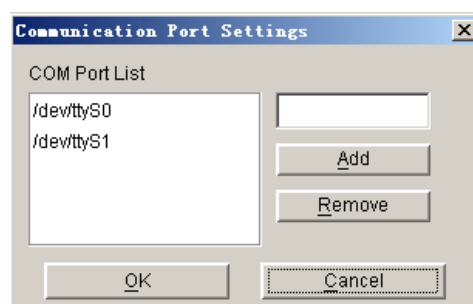


Diagram 3-2-24

The default serial port device, please refer to the following Table 3-2-24.

Platform	Serial Port Devices
Linux	/dev/ttyS0 /dev/ttyS1.
Solaris	/dev/ttya /dev/ttyb
HP-UX	/dev/tty0p0 /dev/tty1p0 /dev/tty0p1 /dev/tty0p2
AIX	/dev/tty0 /dev/tty1
UnixWare	/dev/tty1A /dev/tty2A
Tru64	/dev/tty00 /dev/tty01
FreeBSD	/dev/ttyd0 /dev/ttyd1

Table 3-2-24

Note: If the "OK" button is invalid, it means that your access right to the current Agent is "read only", so you can't carry out the parameter setting. You should log in as a super user.

Chapter 4 How to do

1. How to realize the conversion of the appointed COM port?

If the computer with Winpower has multiple serial ports, Winpower can allow the users to change the current serial ports connected to the device via "Auto search Device" menu. Refer to the following Diagram 4-1-1.

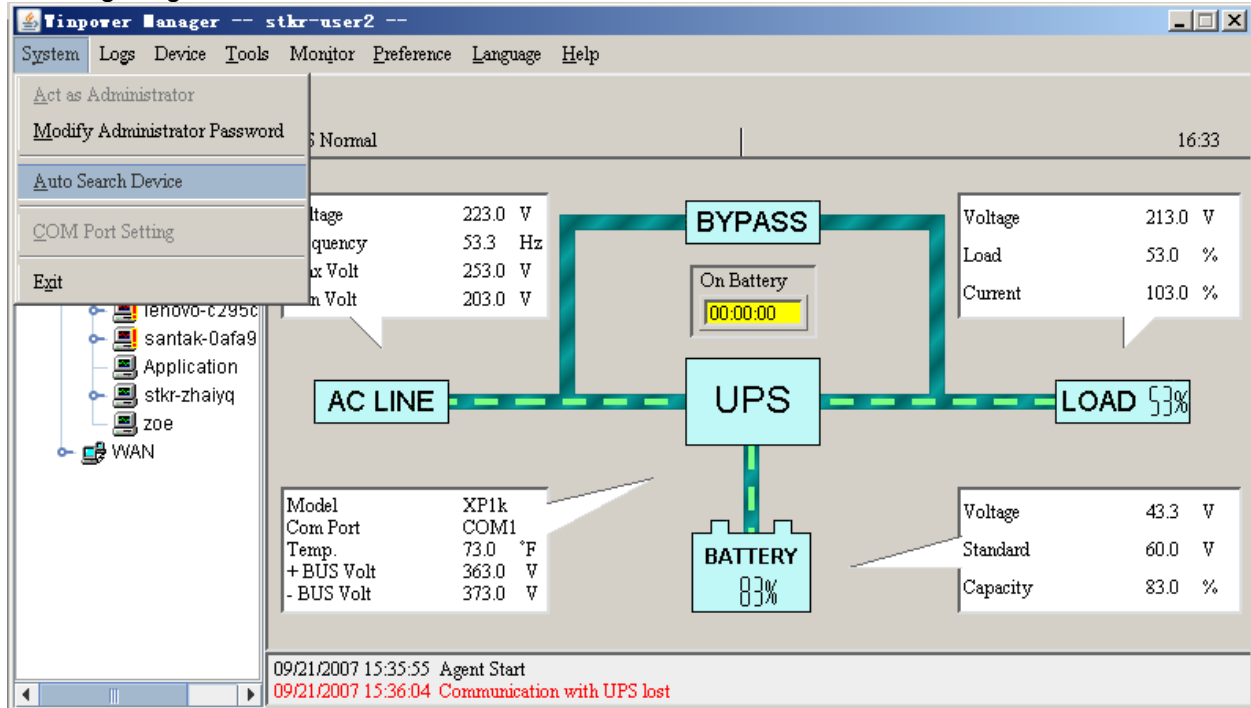


Diagram 4-1-1

There is a tree view on the left displaying a hierarchical list, such as Root, LAN, the Agent name, the COM port and the Device model. Refer to the following diagram 4-1-2.

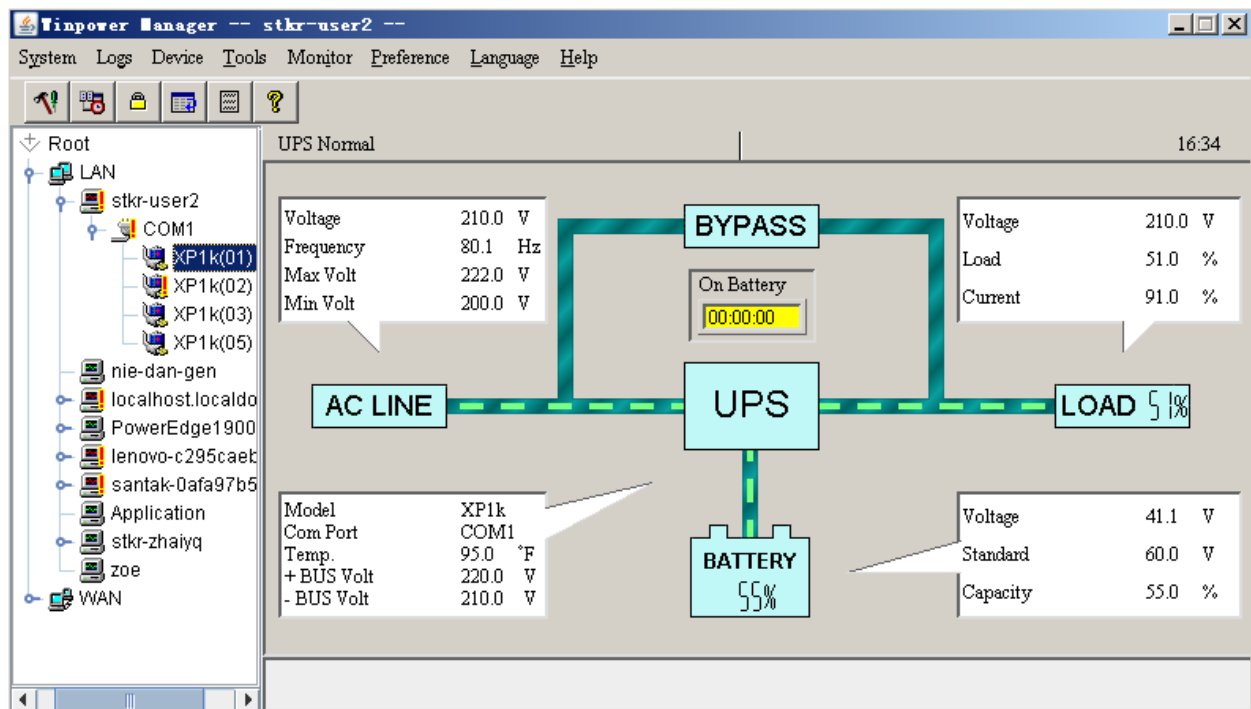


Diagram 4-1-2

When user selects a device model, "Manager" Window will show detail about the device on the right.

For Linux and UNIX, Winpower can't detect the serial port device automatically. If the serial port can't be found in the default setting table, you must add it manually in the "Communication Port Settings" dialog. Refer to the following Diagram 4-1-3.

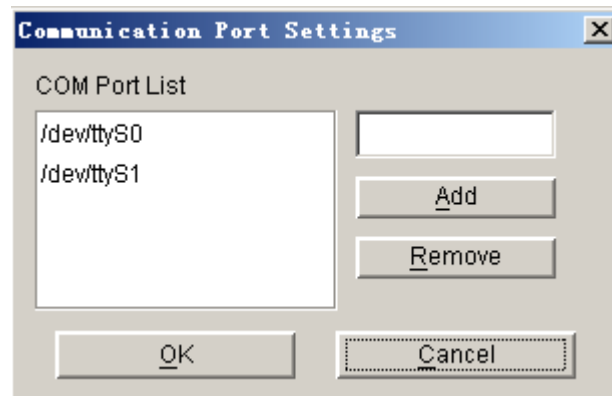


Diagram 4-1-3

The default serial port devices setting: refer to the following Table4-1-1.

Platform	Serial Port Devices
Linux	/dev/ttyS0 /dev/ttyS1.
Solaris	/dev/ttya /dev/ttyb
HP-UX	/dev/tty0p0 /dev/tty1p0 /dev/tty0p1 /dev/tty0p2
AIX	/dev/tty0 /dev/tty1
UnixWare	/dev/tty1A /dev/tty2A
Tru64	/dev/tty00 /dev/tty01
FreeBSD	/dev/ttyd0 /dev/ttyd1

Table4-1-1

Note: For the first time, starting Agent takes more time than later to communicate with the device. And the software will keep a record of the device. Next time, Winpower will start according to the last record. If device COM port, device model or slave address have been changed, user should click "Auto Search Device" item of "System" menu to get correct device information.

2. How to realize broadcasting message in LAN

Winpower has the function of sending the event message to the customer timely via Windows message service. Refer to the notice in section 13 of Chapter 3 ("Broadcast Message Settings" Dialog) and Appendix B (Winpower Event Table) to learn general operation. Refer to the following diagram 4-2-1.

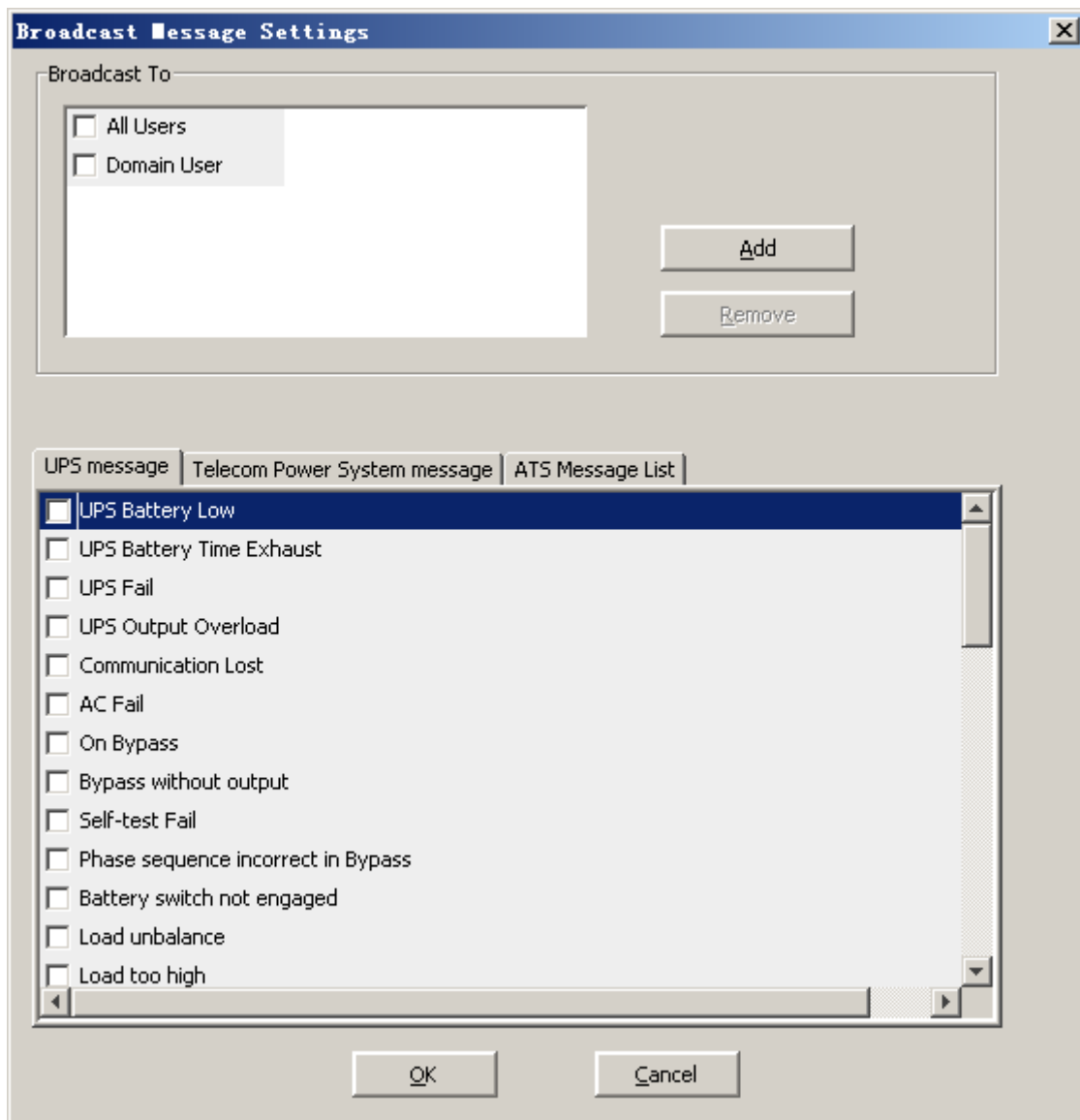


Diagram 4-2-1

Refer to the range of broadcasting, there are three options: All Users, Domain Users and special users.

All users indicate that the message will be sent to all computers in the same network with this computer, no matter whether it is in the same domain.

Domain users indicate that the message will be sent to all computers only in the same NT domain with this computer.

Special users indicate that the message will be sent only to one or a group of defined users, but not others any more.

To realize the function, you should set up the “Add Broadcast User” dialog first. Refer to the following diagram 4-2-2.

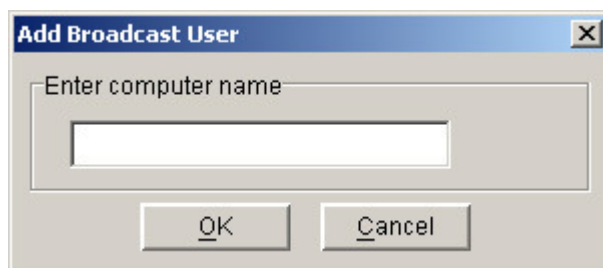


Diagram 4-2-2

In the dialog above, after inputting the computer name which will receive messages, select “OK” button to finish the setting. The name of the computer which you have keyed in will be displayed in the “Broadcast Message Settings” dialog. Select the events that will be sent to the users, and press the “OK” button, the setting will become effective. Refer to the following diagram 4-2-3.

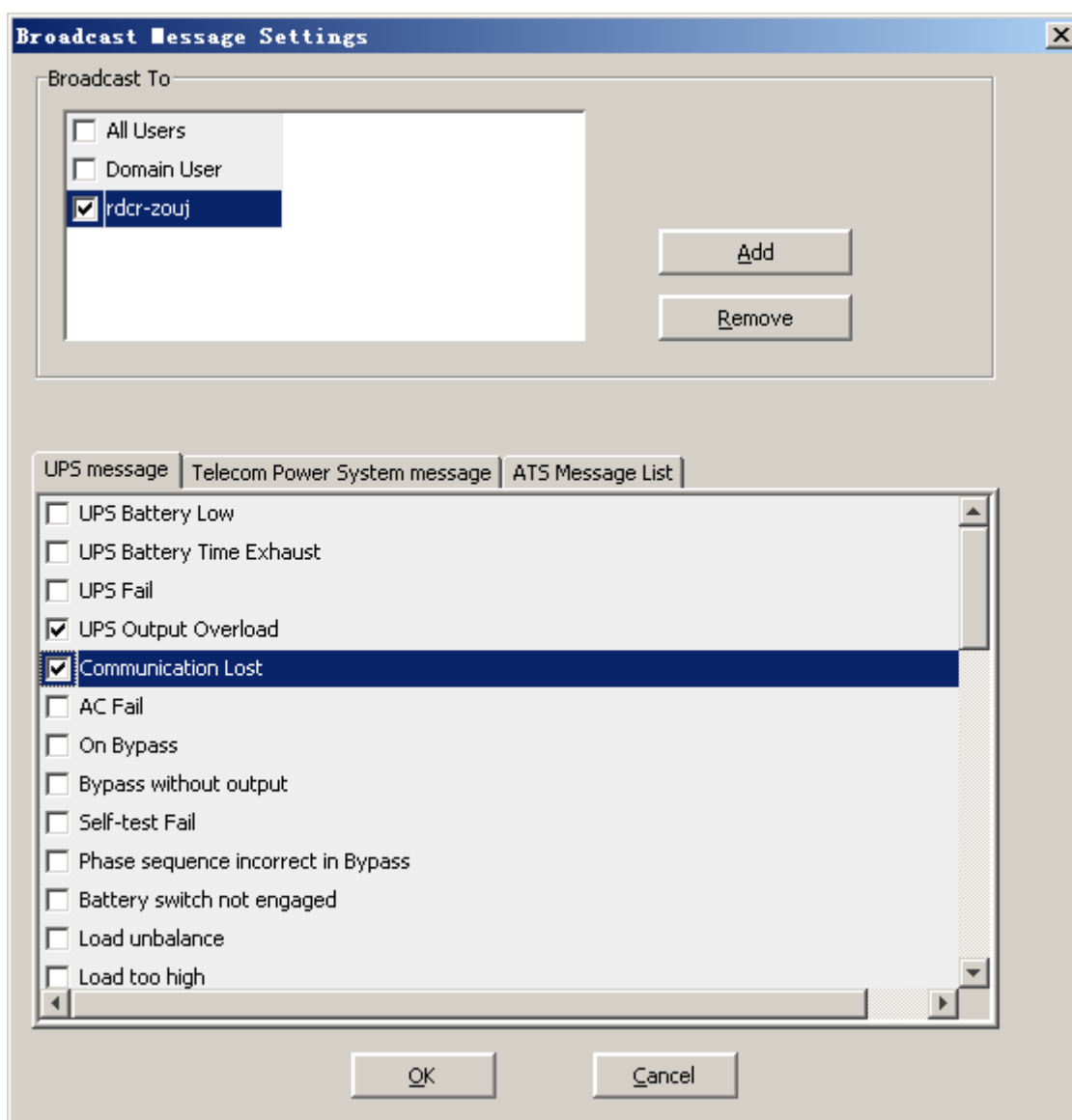


Diagram 4-2-3

Note: Only on Windows, the function can be carried out. To receive broadcast message, "Winpopup" in Windows95/98 and "Messenger Service" in Windows NT/2000 must be started.

3. How to realize the schedule of adding/Removing UPS self-test

Click the “Battery Self-Test Schedule” menu of “Device” menu to popup the “UPS Test Manager” dialog. Refer to the following diagram 4-3-1.

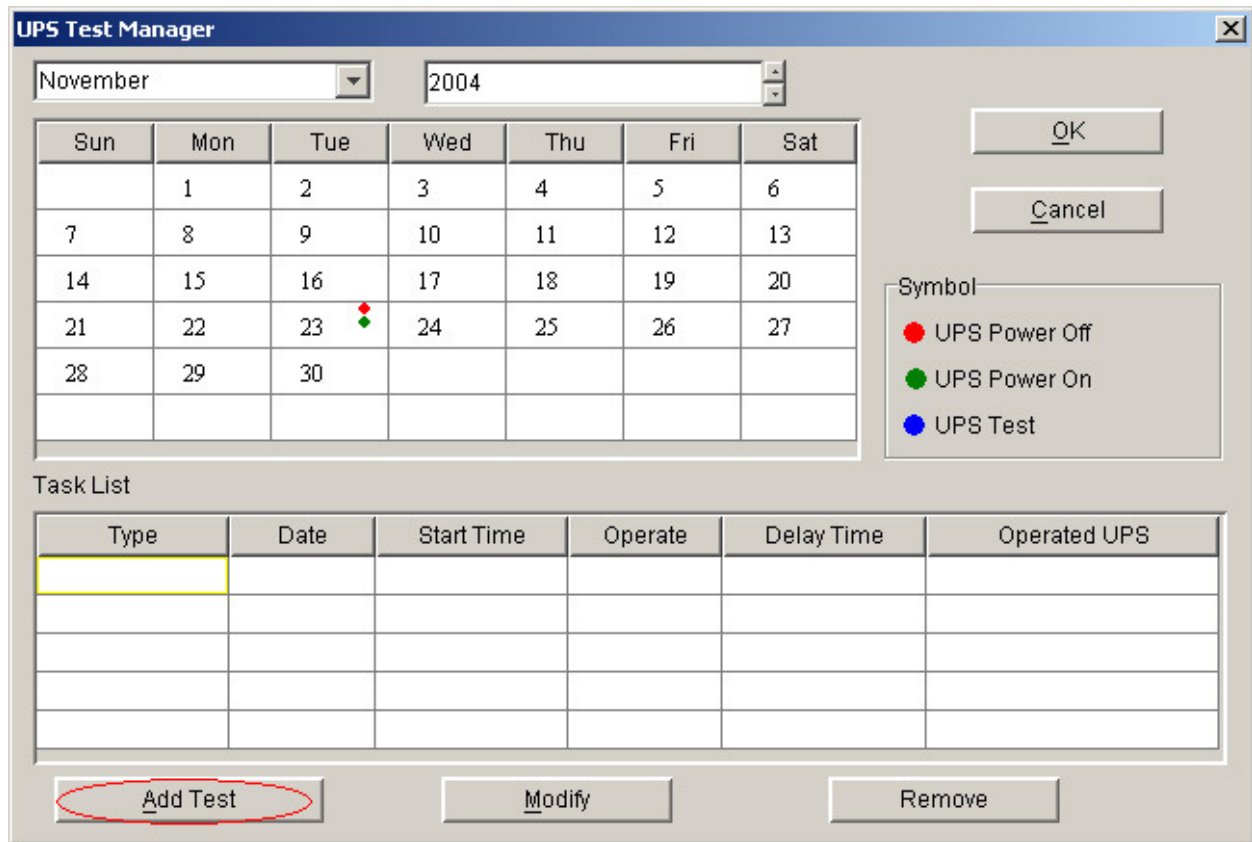


Diagram 4-3-1

Note: If the “OK” button of the dialog is invalid, it means that your access to the current Agent is “read only”, and you can’t setup it. You should log in as a super user.

➤ Add the task of UPS self-test

Click the “Add test” button, and will popup the “UPS Self-test” dialog. Refer to the following diagram 4-3-2.

Diagram 4-3-2

In the dialog, users can make a choice of setting UPS self-test task as in a special time or monthly from the options of “once” or “monthly”. You may set the start time of UPS self-test in date and time combo box.

Note: the new self-test task can’t conflict with the UPS self-test or UPS Power on/off task that has already been set.

You can select one of the self-test modes from the following.

- Self-test for 10 seconds
- Self-test until the battery low
- Self-test for 1 to 99 minutes

Press the “Cancel” button, the dialog will be closed and the setting above is invalid. Press the “Ok” button, the dialog will be closed and the task setting will present to the task list. Refer to the following diagram 4-3-3.

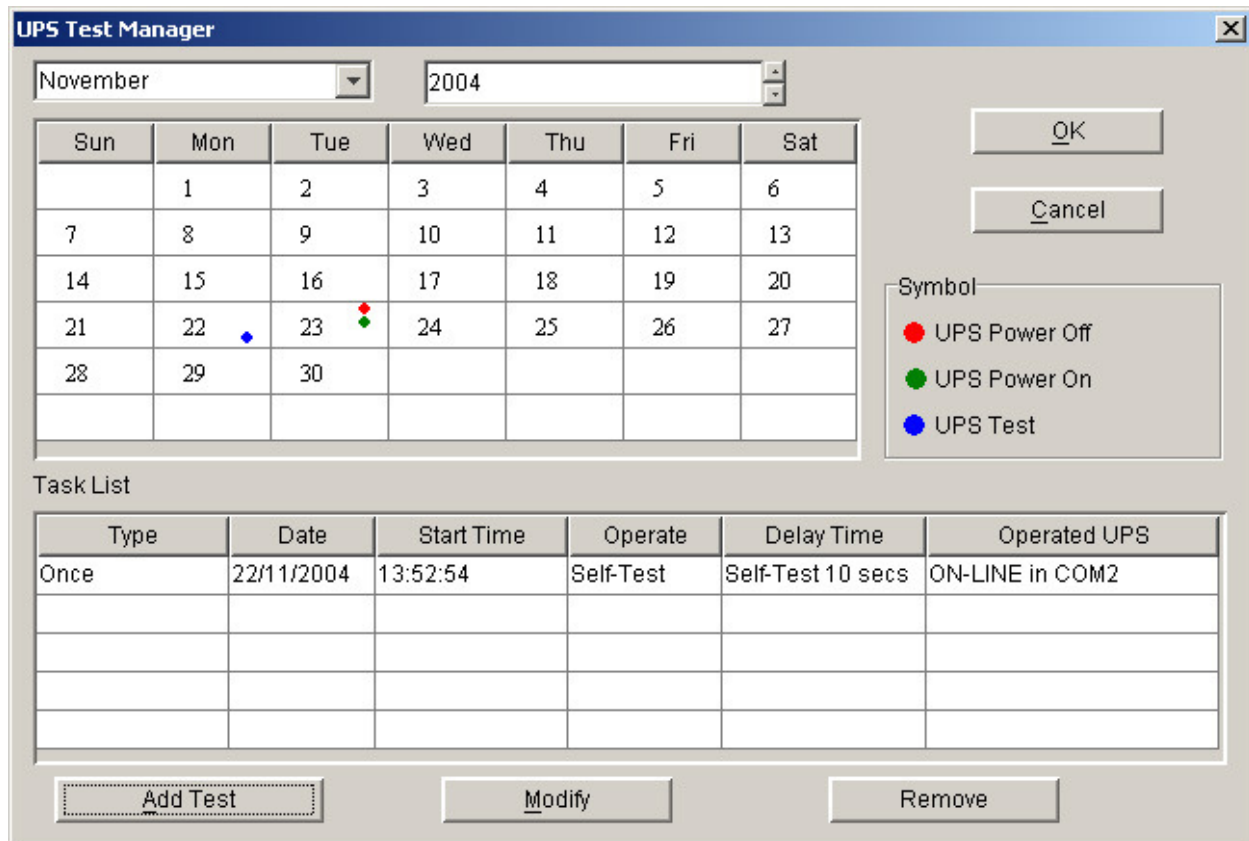


Diagram 4-3-3

Press the “OK” button to finish the setting. Refer to the diagram 4-3-3.

➤ Modifying UPS self-test task

Select one of the UPS self-test tasks in the task list, click “Modify” button to modify the task that has been set in the popup dialog. Refer to the following diagram 4-3-4.

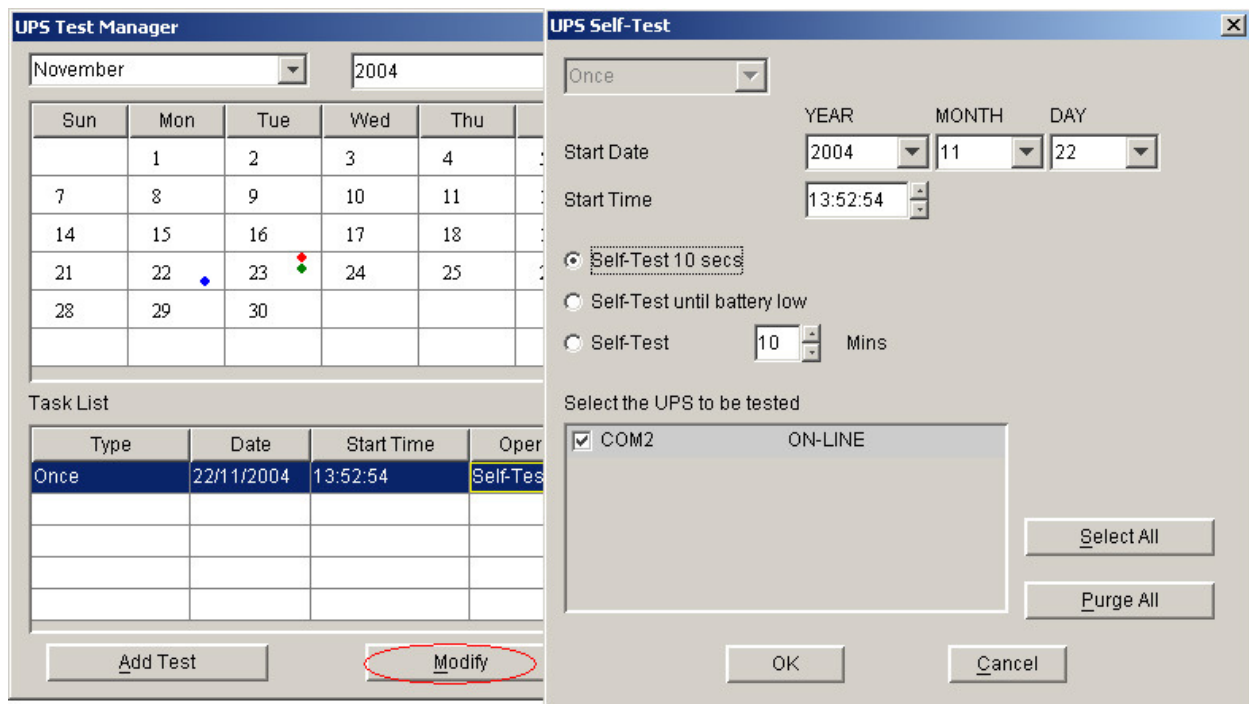


Diagram 4-3-4

After finishing the modification, click “OK” button to save.

➤ **Remove UPS self-test task**

Select one of the UPS self-test tasks in the task list. Click “Remove” button to cancel the task. Refer to the following diagram 4-3-5.

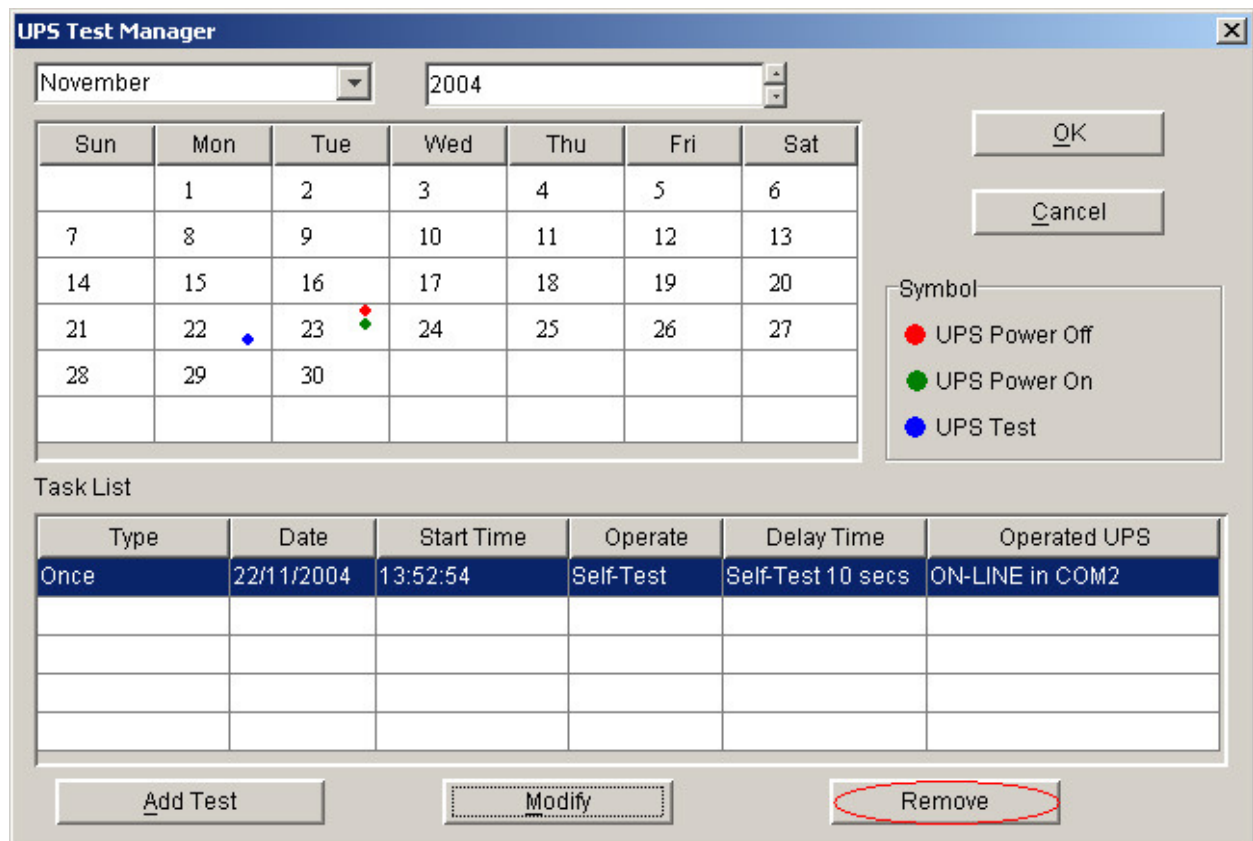


Diagram 4-3-5

4. How to realize the schedule of adding/Removing UPS on/off

Click the “UPS On/Off Manager” menu of the “Control” menu, and will pop up the “UPS On/Off Manager” dialog. Refer to the following diagram 4-4-1.

UPS OnOff Manager

November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OK
Cancel

Symbol

- UPS Power Off
- UPS Power On
- UPS Test

Task List

Type	Date	Start Time	Operate	Delay Time	Operated UPS

Add UPS OnOff Modify Remove

Diagram 4-4-1

Note: the function only for UPS. If the “OK” button of the dialog is invalid, it means that your access to the current Agent is “read only”, and you can’t modify it. You should log in as a super user.

➤ Add the task of UPS On/Off

Click “Add UPS On/Off” button, and will pop up “Off UPS” dialog. Refer to the following diagram 4-4-2.

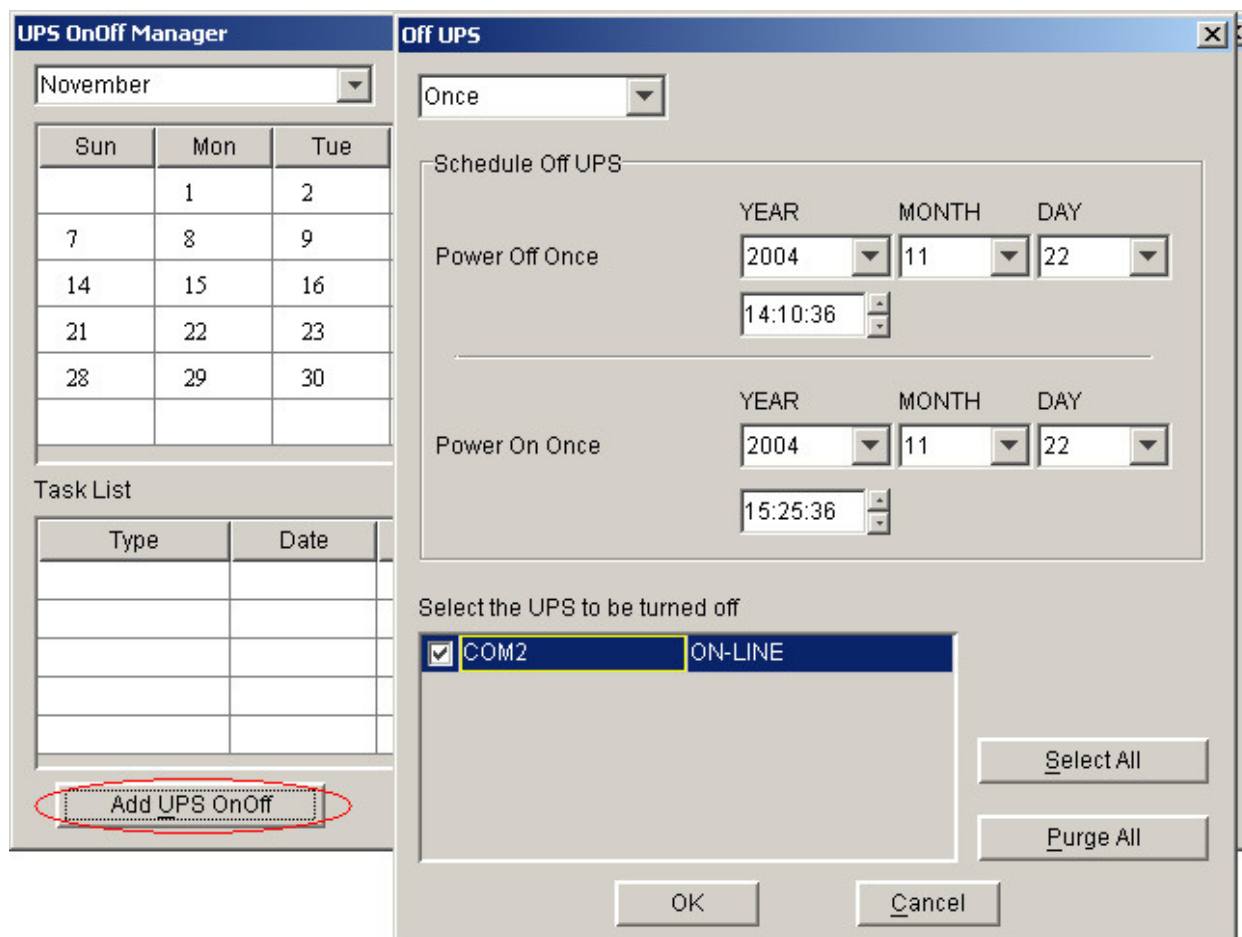


Diagram 4-4-2



In the dialog, users can make a choice in the setting of UPS Power On/Off weekly or in a special time via the option of “Once” or “Weekly” in the combo box. Set the UPS off and restart time in the date and time combo box.

Note: the new task of UPS On/Off can’t conflict with the UPS self-test and UPS On/Off tasks that have been set.

Click the “Cancel” button, the dialog will be closed and the above settings are invalid. Click “Ok” button, the dialog is closed and the task settings will be shown in the task list. Refer to the following diagram 4-4-3.

UPS OnOff Manager




November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22 	23 	24	25	26	27
28	29	30				

OK

Cancel

Symbol

-  UPS Power Off
-  UPS Power On
-  UPS Test

Task List

Type	Date	Start Time	Operate	Delay Time	Operated UPS
Once	22/11/2004	14:10:36	Shut off UPS	75Mins	ON-LINE in COM2

Add UPS OnOff

Modify

Remove

Diagram 4-4-3



Click the "OK" button to finish the settings. Refer to the following diagram 4-4-3.

➤ **Modify the task of UPS On/Off**

Select one of the UPS On/Off tasks in the task list, click "Modify" button to modify the tasks that have been set in the popped up dialog. Refer to the following diagram 4-4-4.

UPS OnOff Manager

November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22 	23 	24	25	26	27
28	29	30				

Task List

Type	Date	Start Time	Operate
Once	22/11/2004	14:10:36	Shut off UPS

Add UPS OnOff

Modify

Off UPS

Once

Schedule Off UPS

Power Off Once

YEAR MONTH DAY

2004 11 22

14:10:36

Power On Once

YEAR MONTH DAY

2004 11 22

15:25:36

Select the UPS to be turned off

☒ COM2 ON-LINE

Select All

Purge All

OK

Cancel

Diagram 4-4-4

After finish the modification, press the “OK” button to save.

➤ **Remove the UPS On/Off task**

Select one of the UPS On/Off tasks in the task list, click “Remove” button to remove the task. Refer to the following diagram 4-4-5.

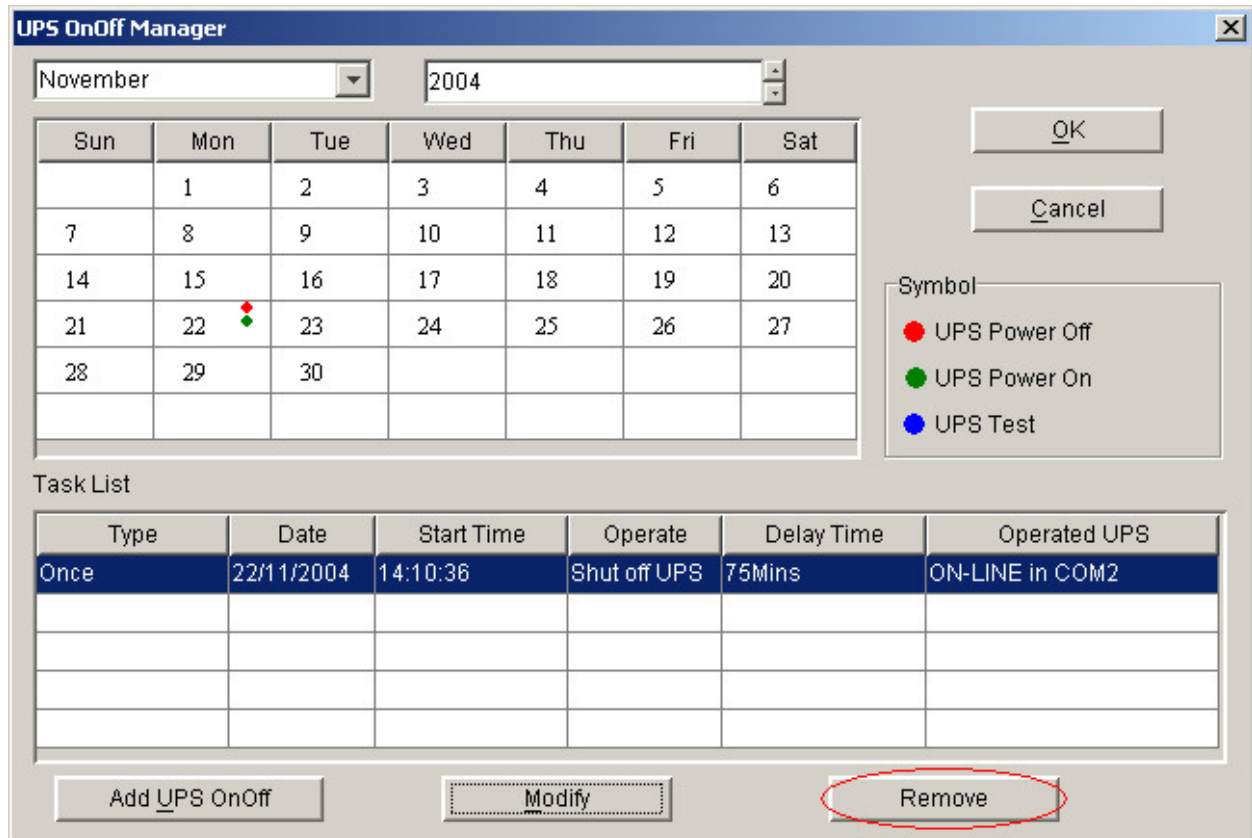


Diagram 4-4-5

5. How to realize the network shutdown function

The function is only for UPS.

Click the “Shutdown Parameter” item of the “Device” menu, and will pop up “Shutdown Settings” dialog. Refer to the following diagram 4-5-1.

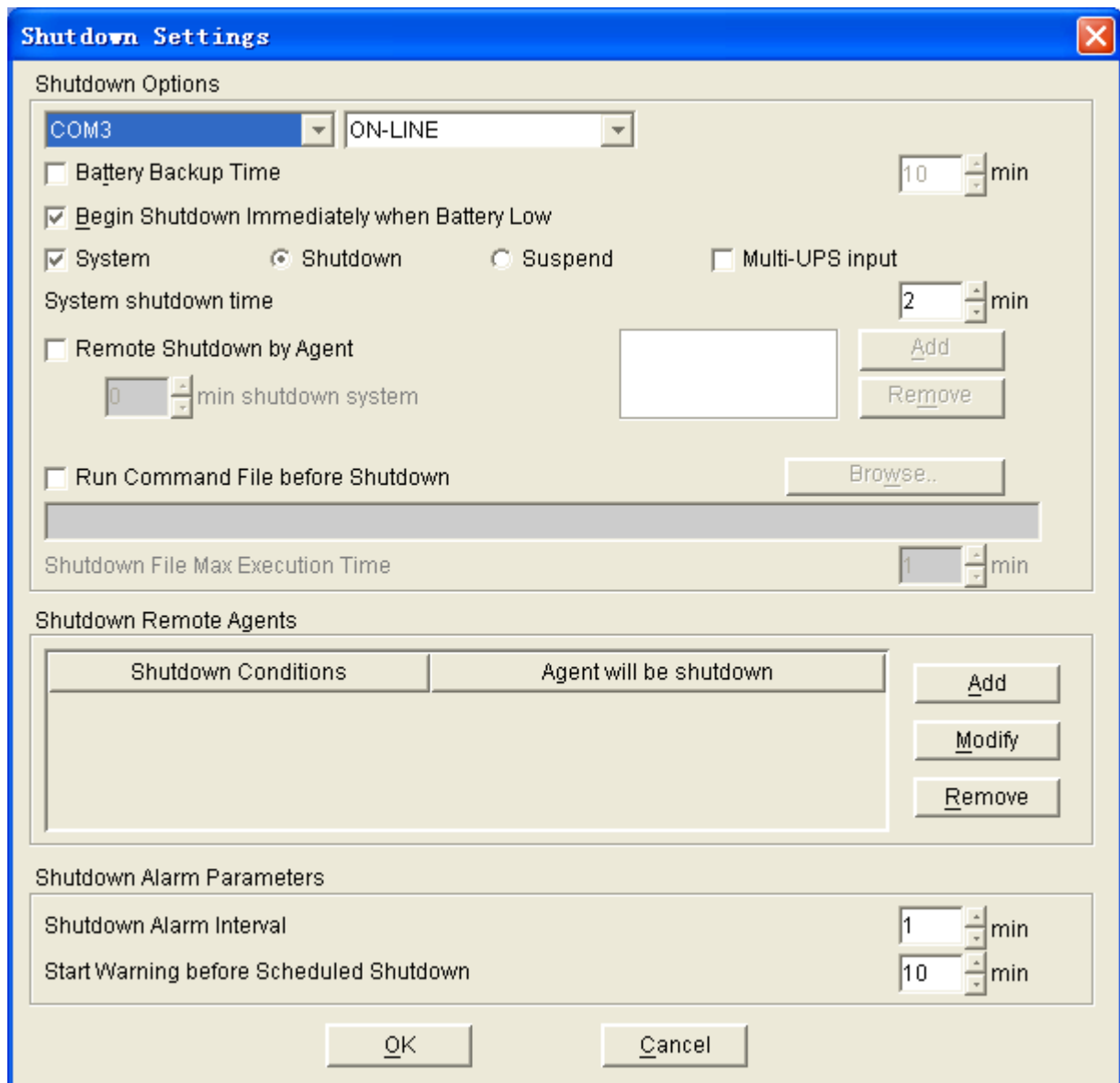


Diagram 4-5-1

Remote Shutdown by Agent:

Click the “Add” button in the “Shutdown Options”, enter IP address of agent in the popped up dialog, and click the “OK” button to finish the setting. When the Agent received the specified agent's shutdown signal, system will be shut down in delay time.

Shutdown Remote Agents:

Click the “Add” button in the “Shutdown Remote Agents”, configure the shutdown conditions, enter IP address of agent in the popped up dialog, and click the “OK” button to finish the setting. When shutdown condition is touched off, agent will send shutdown signal to the appointed remote Agents.

6. How to realize Setting up shutdown parameter

The function is only for UPS.

Click the “Shutdown Parameter” item of the “Device” menu, and will pop up “Shutdown Settings” dialog. Refer to the following diagram 4-6-1.

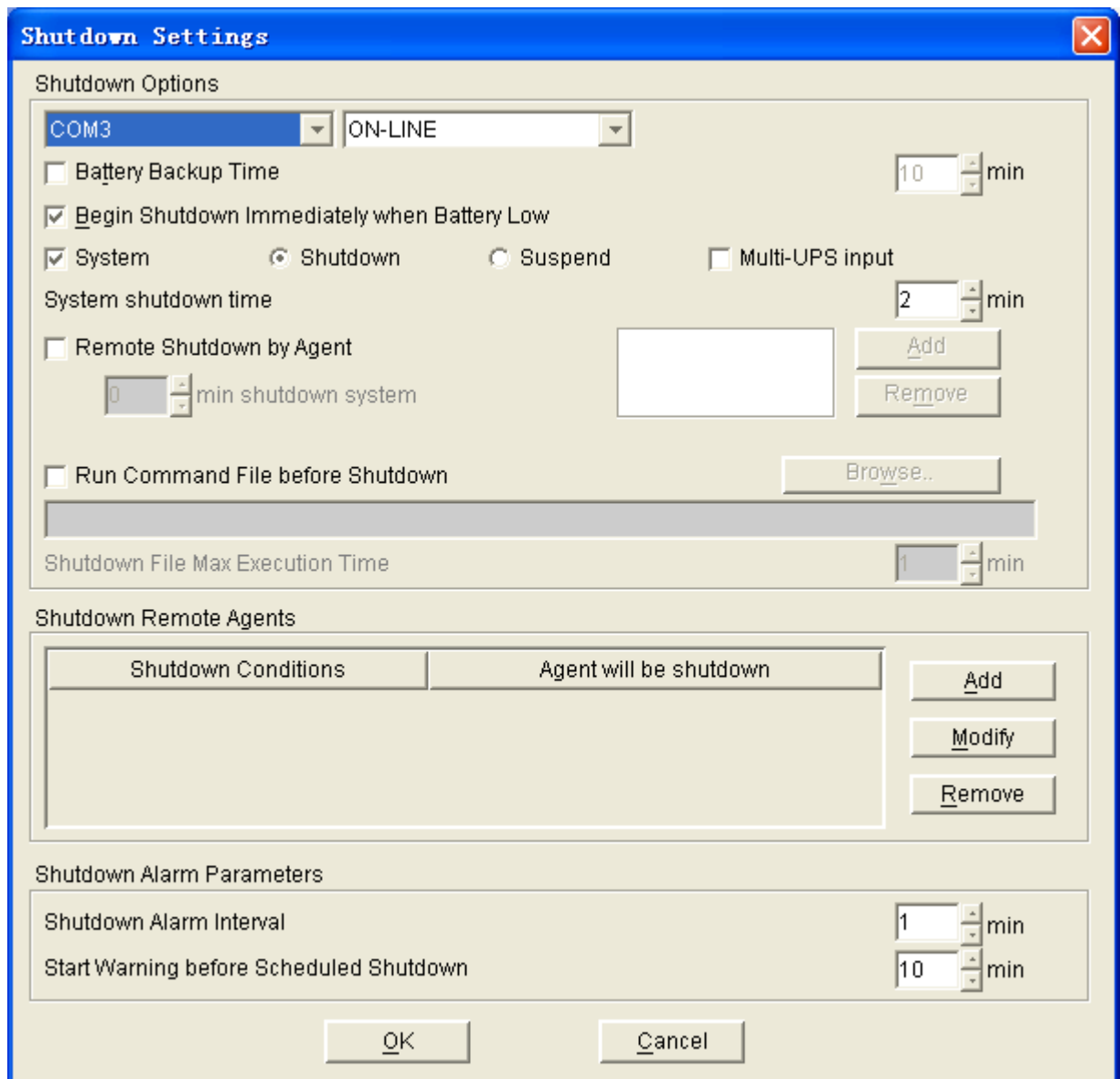


Diagram 4-6-1

Click the “Add” button in the “Shutdown Options”, and enter the IP address of agent in the popped up “Agent’s IP address” dialog. Refer to the following diagram 4-6-2.

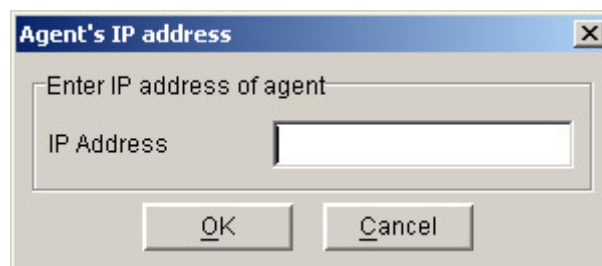


Diagram 4-6-2

Click the “Add” button in the “Shutdown Remote Agents”, and configure the Shutdown conditions in the popped up “Shutdown Remote Agents” dialog. Click the “Add” button in the “Shutdown Remote Agents” dialog, and enter the Agent’s IP address in the popped up “Shutdown Remote Agents” dialog. Refer to the following diagram 4-6-3.

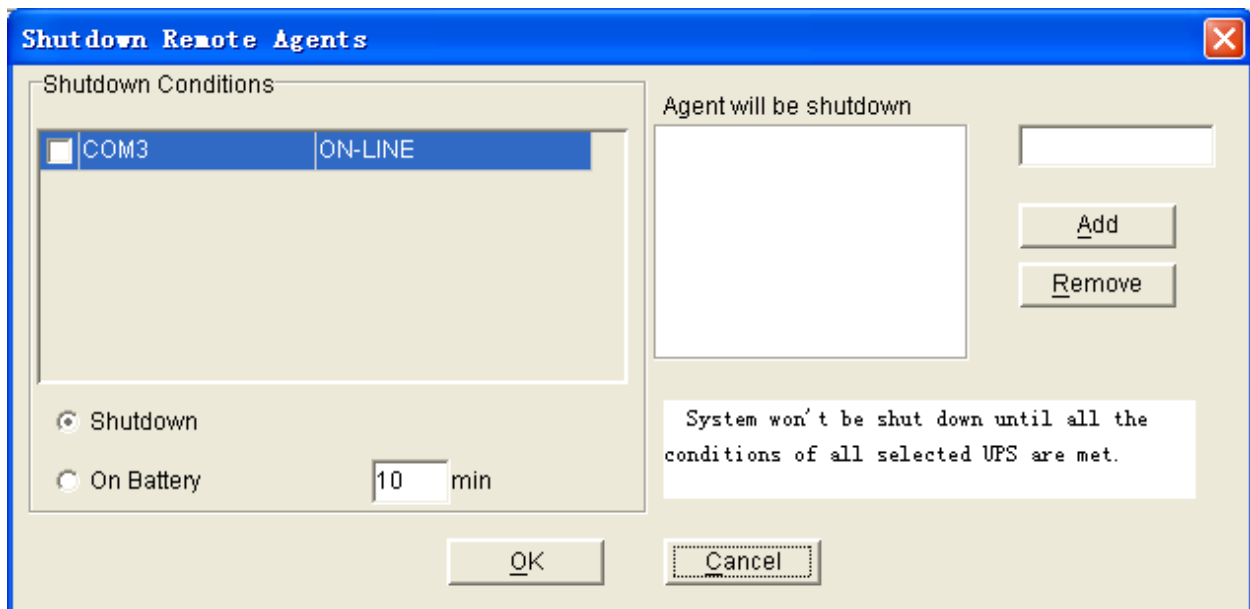


Diagram 4-6-3

Configure the shutdown parameter in the dialog:

✓ Shutdown options:

- **Battery backup time:** The time that the UPS's battery is able to supply power when utility power fails.
- **Begin Shutdown Immediately when Battery Low:** When the check box is selected and battery low event occurs, Agent will shut down the UPS immediately, otherwise the shutting down time will be controlled according to battery back up time.
- **Shutdown System:** When this check box is selected, system will be shut down while the appointed UPS is being turned off.
- **Suspend System:** When the radio box is selected, system will suspend in the disk in shutdown sequence. The function only can be carry out on some Windows, and hibernate support must be enabled from /Control Panel/Power Options/Hibernate.
- **Multi-UPS input:** When the check box is selected, system won't be shut down until all the conditions of all selected UPS are met.
- **System shut down need time:** The time to be needed to shut down the system, from the beginning of shutdown to the end.
- **Remote Shutdown by Agent:** When the check box is selected, system can be shutdown by other Agent.
- **XX min shutdown system:** Receive the specified agent's shutdown signal, delay XX minutes and shut down system.
- **Run Command File before Shutdown:** Before system shutting down, Agent can execute a file, if the parameter isn't null, agent won't begin to shut down the system until the execution file has been executed.
- **Shutdown File Max Execution Time:** Before system shutting down, the time to be needed to execute the shutdown file.

✓ Shutdown Remote Agents:

- **Shutdown remote Agent's Conditions:** The condition can be "UPS be shutdown" or "The time UPS on battery exceed setting time".
- **Agents be Shutdown:** When shutdown condition is touched off, Agent will send shutdown signal to the appointed remote agents.

✓ Shutdown Alarm Parameters:

- **Shutdown Alarm Interval:** The interval that agent pops up an alarm message before shutting down.
- **Start Warning before Scheduled Shutdown:** If user has setup shutting down on schedule, agent will begin to alarm user before the set time.

7. How to realize the modification of Device control parameter

For ON-LINE UPS:

- Click “UPS control parameters” item of the “Device” menu, and will pop up “UPS control parameters” dialog. Refer to the following diagram 4-7-1.

UPS Control Parameters

Input Frequency Range	Low Limit(40.0 -- 49.0)	46.0	Hz
	High Limit(51.0 -- 60.0)	54.0	Hz
Voltage Range on Bypass	Low Limit(80 -- 219)	80	V
	High Limit(221 -- 286)	264	V

Panel Control

Allow OFF-Key to Enable/Disable Audible Warning When UPS Works on Bypass	<input checked="" type="radio"/> Yes <input type="radio"/> No
Warning When UPS Works on Bypass	<input type="radio"/> Yes <input checked="" type="radio"/> No
Allow ON-Key to Enable/Disable Audible Warning When UPS Works on Battery Mode	<input checked="" type="radio"/> Yes <input type="radio"/> No
Warning When UPS Works on Battery Mode	<input type="radio"/> Yes <input checked="" type="radio"/> No

Audible Warning

Bypass Audible Warning	<input checked="" type="radio"/> On <input type="radio"/> Silent
Battery Mode Audible Warning	<input checked="" type="radio"/> On <input type="radio"/> Silent

Operation Option

Work On Bypass When UPS Turned Off	<input checked="" type="radio"/> Yes <input type="radio"/> No
Auto Reboot UPS When AC Input Restored	<input checked="" type="radio"/> Yes <input type="radio"/> No

Default OK Cancel

Diagram 4-7-1

- The following UPS control parameter can be modified in the dialog:
 - **The limit value of the input frequency:** when the frequency of the utility power is out of this range, UPS will count it abnormal and switch to battery supply.
 - **The limit value of the bypass voltage:** when UPS supplies in bypass mode, if the utility voltage is out of this range, UPS will cut off bypass output.
 - **Allow OFF-Key to Enable/Disable Audible Warning When UPS Works on Bypass:** to choose “Yes”, when UPS is supplied by bypass, users can turn off the bypass audible alarm (beep once every 2 minutes) by pressing “OFF” button on the UPS panel for one time, and pressing one more time to recover it. To choose “No”, the “OFF” button on the UPS panel cannot be used to control bypass audible alarm on or off.
 - **Allow ON-Key to Enable/Disable Audible Warning When UPS Works on Battery Mode:** to choose “Yes”, when UPS is supplied by batteries, users can turn off the audible alarm (beep once every 4 seconds) supplied by batteries by pressing “ON” button on the UPS panel for one time, and pressing one more time the audible alarm can be turned on again. To choose “No”, the “ON” button on the UPS panel can’t be used to control the audible alarm supplied by batteries on or off.
 - **Bypass Audible Warning:** to choose “On”, when UPS is supplied by bypass, it is allowed to enable bypass audible alarm. To choose “Silent”, when UPS is supplied by bypass, it is not allowed to enable audible alarm, at this time the “OFF” button on the UPS panel can’t turn on the bypass audible alarm.
 - **Battery Mode Audible Warning:** to choose “On”, when UPS is supplied by batteries, it is allowed to enable audible alarm of battery supply. To choose “Silent”, when UPS is supplied by battery, it is not allowed to enable audible alarm of battery supply. At this time the “ON” button on the UPS panel can’t turn on the audible alarm of battery supply.
 - **Work On Bypass When UPS Turned Off:** to choose “Yes”, when UPS is not turned on, it is in the mode of bypass supply. To choose “No”, when UPS is not turned on, no bypass output is offered.
 - **Auto Reboot UPS When AC Input Restored:** to choose “Yes”, when UPS is

shutdown for the backup time is exhausted or the battery is in low capacitance, once the utility power is recovered, UPS can restart automatically to the normal operating mode. To choose “No”, when the utility power is recovered, UPS can’t restart automatically but in the mode of being not turned on.

Click “OK” button to save what have modified. Click “Cancel” button to make the modification invalid. Click “Default” button to make all the settings to default value.

For special ON-LINE Device:

Parameter	Value	Unit
Bypass Frequency Range	Low Limit (40.0-49.0)	Hz
	High Limit (51.0-60.0)	Hz
Bypass Voltage Range	Low Limit (110-124)	V
	High Limit (130-276)	V
Input Frequency Range	Low Limit (2%-10%)	
	High Limit (2%-10%)	
ECO Frequency Range	Low Limit (5%-10%)	
	High Limit (5%-10%)	
ECO Voltage Range	Low Limit (5%-10%)	
	High Limit (5%-10%)	
Rated Output Voltage	200	V
Voltage Adjustment	+0.5	V
Rated Output Frequency	50	Hz
Maximum Charging Current	3.0	A
Battery Quantity Per String	15	
Panel Control		
Allow Button to Enable/Disable Audible Warning	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Operation Option		
Bypass Forbidden	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Auto Reboot UPS When AC Input Restored	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Buzzer Alarm	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Converter Mode	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ECO Mode	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Parallel Function	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Auto Frequency Detection	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Auto Recover from Overload	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Auto Short-Circuit Clearance	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Deep Discharge function	<input checked="" type="radio"/> Yes <input type="radio"/> No	
EPO Function	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Load Segment	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Bypass when UPS is OFF	<input type="radio"/> Yes <input checked="" type="radio"/> No	

Buttons: Default, Cancel, OK

Diagram 4-7-2

The following UPS control parameter can be modified in the dialog. Some parameter is same as the on-line ups. Other parameter is as following.

- the limit value of the ECO frequency: If ECO mode is enable, and bypass output frequency is in the range, the load power will be supplied by bypass output
- the limit value of the ECO voltage: If ECO mode is enable, and bypass output voltage is in the range, the load power will be supplied by bypass output
- The limit value of the Line frequency: If the line frequency is out of range, UPS will turn to battery mode.
- Output voltage rating: Only be set in no output mode or bypass mode, it can be 200,208,220,230,240
- Voltage adjustability: Only be set in no output mode or bypass mode
- Output frequency rating: Only in no output mode or bypass mode can be set, it can be 50HZ or 60 HZ
- Battery Quantity Per String: Only in no output mode can be set, for 6-10K UPS
- Maximum charging current: Only in no output mode can be set, for 6-10K UPS
- Converter Mode: choose “Enable”, then UPS can work in converter mode
- ECO Mode: choose “Enable”, then UPS can work in ECO mode
- Parallel Mode: choose “Enable”, then UPS can work in parallel mode
- Frequency Auto Detection: choose “Enable”, then UPS can be set output rating frequency via input frequency
- Auto Re-transfer After Overload Clearance: choose “Enable”, if output load overload, UPS will shut down output off, when the load is decreased to 70%, UPS will reboot automatically
- Auto Short-Circuit Clearance: choose “Enable”, then ups will delay 4 seconds and shut down output
- Deep Discharge Function: choose “Enable”, then UPS can discharge deeply
- EPO Function: choose “Enable”, UPS will cut off output immediately until you press the ON_SW more than 2 minutes.
- Power Segment: choose “Enable”, then UPS can manage output itself, only for 1-3K UPS
- Auto Bypass: choose “Enable”, it will switch to the bypass output, when AC power restores

For OFF-LINE UPS:

user can enable or disable battery mode alarm audible by this dialog, Refer to the following diagram 4-7-2.

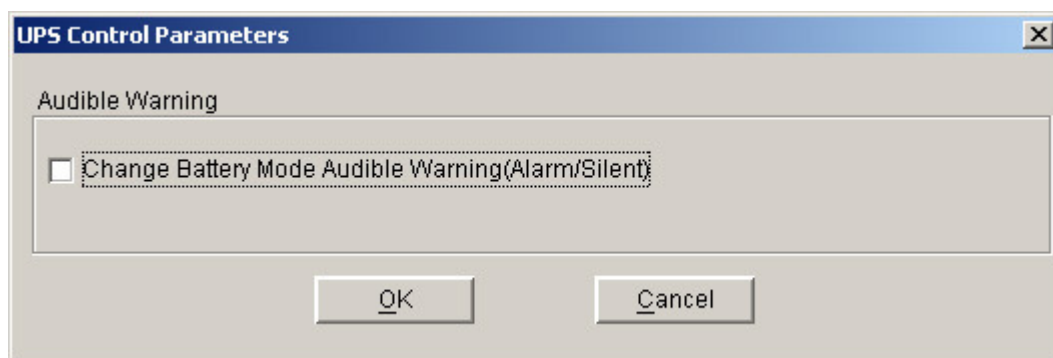


Diagram 4-7-2

Click “OK” button to save what have been modified. Click “Cancel” button to make the modification invalid.

Note: If the “OK” button is invalid, it means that your access right to the current Agent is “read only”, and you can’t carry out setup. You should log in as a super user.

8. How to realize system administrator operation and password modifying realize

System administrator operation

Click “Act as Administrator” item of “System” menu, and will pop up “Administrator” dialog. Refer to the following diagram 4-8-1.

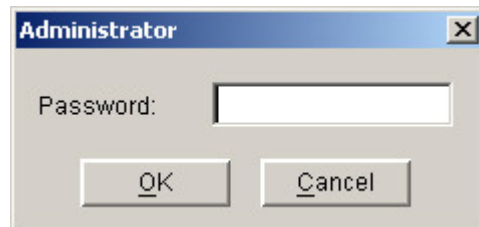


Diagram 4-8-1

Enter the system administrator password in the dialog, and click the “OK” button to finish the setting. If the password is correct, you can get the administrator access right to configure the agent. If the password is incorrect, warning message will popup. Refer to the following diagram 4-8-2.



Diagram 4-8-2

Modifying the system administrator password

Click the “Modify Administrator Password” menu of the “System” menu to popup the “Administrator Password Settings” dialog. The menu is valid within the local Agent only. Refer to the following diagram 4-8-3.



Diagram 4-8-3

Enter the new password in the “New Password” edit box, reenter it in the “confirm password” edit box. Click the “OK” button to finish the setting.

Note: If the “OK” button is invalid, it means that the access right to the current Agent is “read only”, and you can’t operate. You should log in as a super user.

9. How to realize sending event message by email

✓ Precondition

When event occurs, the precondition of realizing sending message by email is connecting the computer with Winpower to the Internet.

✓ Steps

Set “Email Service”: click the “Email setting” item of the “Tools” menu, and will pop up the “Email Settings” dialog. Refer to the following diagram 4-9-1.

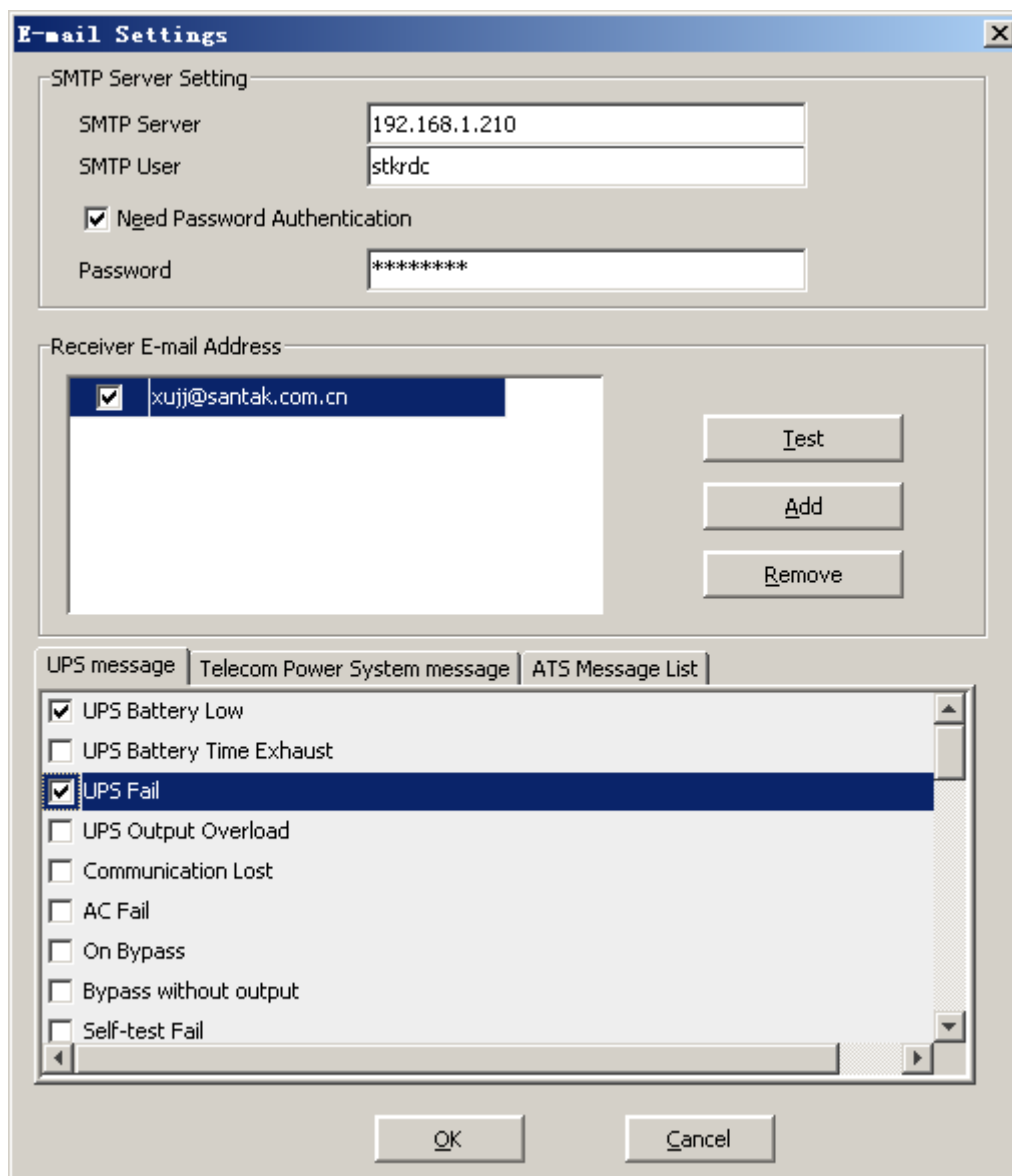


Diagram 4-9-1

SMTP Server is the SMTP Server's address; SMTP User is the account for logging in the server. If SMTP mail server needs password, authentication user should input the password.

Set the receiver Email Address: click the “Add” button of the “Email Settings” dialog, and then pop up “Add Receiver Email Address” dialog. Refer to the following diagram 4-9-2.

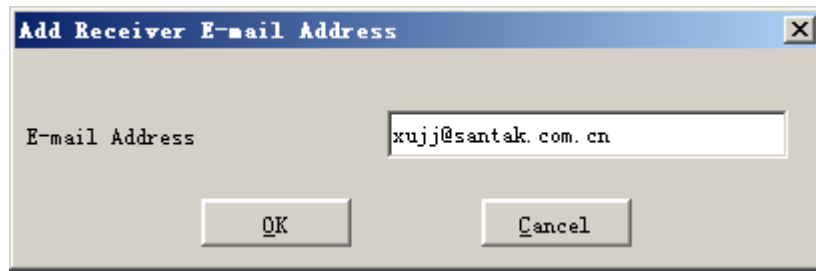


Diagram 4-9-2

Enter the Email Address in the “Add Receiver Email Address” dialog, and select “OK” button to save and exit.

Completing event setting: select one of the events (For example, UPS battery low) from the “Send message”; and then select the user that has been set in the “Receiver Email Address” list, finally select the “OK” button to save and exit.

10. How to realize sending event messages by mobile phone

✓ Precondition

The precondition of sending messages by mobile phone is that the computers with Winpower must have at least one communication port used to be connected to GSM Modem or mobile phone.

✓ Steps

Configure “SMS”: click the “SMS setting” item of the “Tools” menu, and will pop up the “SMS Setting” dialog. Refer to the following diagram 4-10-1.

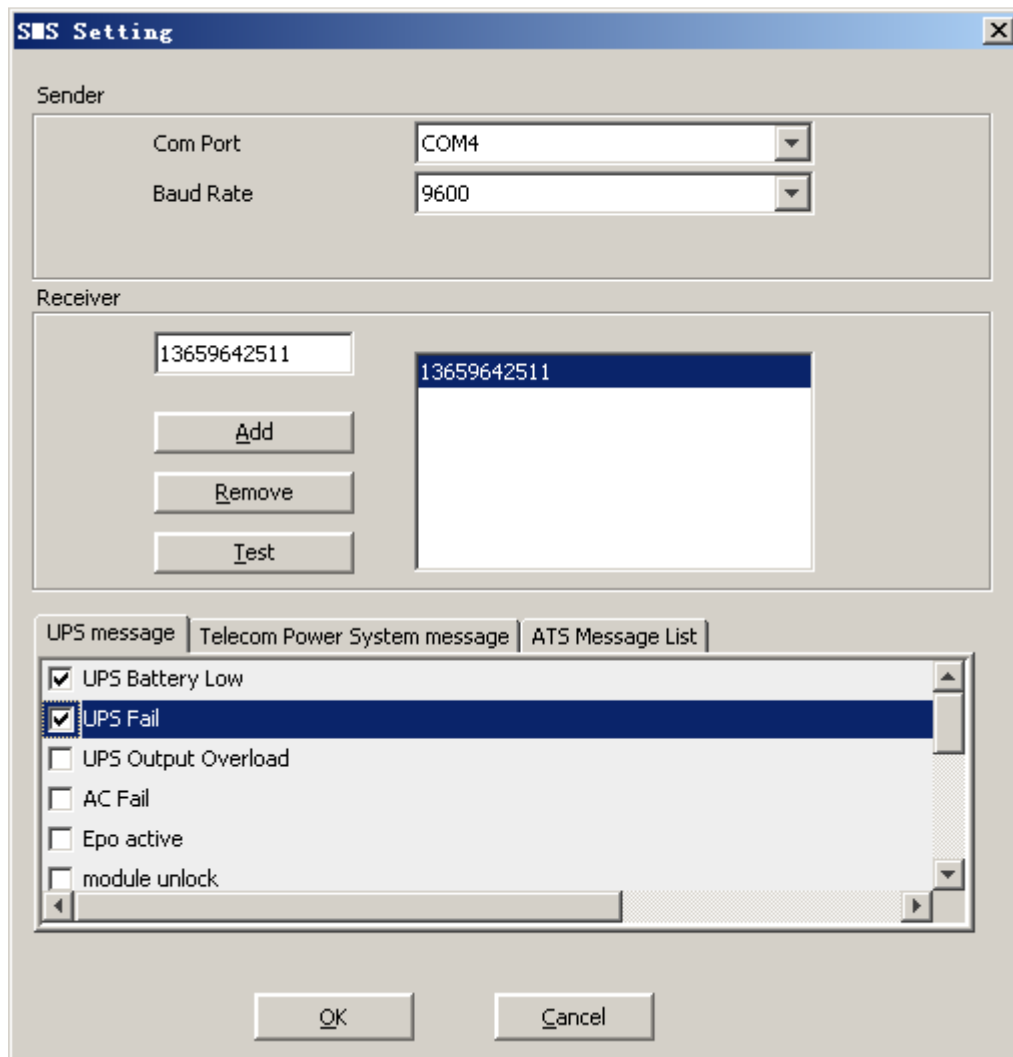


Diagram 4-10-1

Below is the use remark of SMS Setting, refer to the diagram 4-10-1.

1. Sender: SMS is sent through GSM modem or mobile phone connected with your computer. User should select COM port used by GSM Modem or mobile phone, and set baud Rate of this COM port.
2. Receiver: the mobile phones numbers that can receive the SMS. It can be one or more. If the event occurs, the software will send the short message to all the phone numbers in the "Receiver" list.
3. Send message: Use can select the event that need to be informed by SMS.

Another method to select event code:

Select one of the events (for example: AC Fail) from the "Event List", that is on the left side of the "Event Action"; and then select "Send SMS" on the right side, finally select the "OK" button to save and exit.

11. How to realize sending event messages by pager

- ✓ Precondition

When event happens, the precondition of sending messages by pager is that the computers with Winpower must have at least one communication port used to connect to modem.

✓ **Events supported**

For UPS, the function only supports the following events:

- UPS AC fails
- UPS low battery
- UPS hardware failure
- UPS output overload

For Telecom power and ATS, all events are supported.

✓ **Steps**

Configure “Pager”: click the “Pager setting” item of the “Tools” menu, and will pop up the “Pager Setting” dialog. Refer to the following diagram 4-11-1.

Pager Setting

Modem Port: COM4

Access Number: [] Wait: 0 sec

Pager Number: [] Wait: 0 sec

☐ Dialling [] to external line Wait: 1 sec

☐ Dialling [#] after message

UPS message | Telecom Power System message | ATS Message List

Send	Event Code	Event Name
<input type="checkbox"/>	101	UPS input power fail
<input type="checkbox"/>	102	UPS battery low
<input type="checkbox"/>	103	UPS hardware fail
<input type="checkbox"/>	104	UPS output overload

OK Test Cancel

Diagram 4-11-1

In the “Pager Setting” dialog, the parameters that can be set are shown in the following Table 4-11-1.

Parameter	Description
Modem Port	Select COM port which is being used by Modem.
Access Number	For some pager service, a delay is needed between dialing access number and message code.
Pager Number	For some pager service, a delay is needed between dialing pager number and message code.
dailing number to exterior line	For extension line, it is always necessary to dial a specified number and delay a specified time to access Exterior Line.
dailing number after message	For some pager service, need to dial a specified number to end message code.
Event Code	The event code is dialed as the message code and will be displayed on pager.

Table 4-11-1

If the exterior line phone number can't be dialed directly, please fill in the switch number in the "Dailing to exterior line bar". The waiting time after dialing can be set according to what you need, the default value is one second.

"Access number" is the station number that the pager joined (which can only be auto station). The waiting time is the delay time between dialing paging station number and pager number, the delay time is decided by the paging station, for LianTong 192 auto station, the waiting time is 1 second.

"Pager Number" is the number of the pager that accepts the communication. The waiting time is the delay time between dialing pager number and message code (paging message content), the delay time is decided by the paging station, for LianTong 192 auto station, the waiting time is 1second.

Select event code from the "Pager Setting" and select "OK" button to save and exit.

Another method to select event code:

Select one of the events (for example: AC Fail) from the "Event List", that is on the left side of the "Event Action", and then select "Send Pager" on the right side, finally select the "OK" button to save and exit.

12. How to realize monitoring device remotely in LAN within the same network

✓ Precondition

To realize monitoring device remotely in LAN within the same network, the communication protocol of the computers with Winpower must include TCP/IP protocol.

✓ Steps for realization

- **Keep network communication smooth:** test with network command "PING" under command prompt window. For example, a computer named xc in LAN, whose corresponding IP address is 192.168.1.221, and then you can finish the test with command "ping 192.168.1.221". Refer to the following Diagram 4-12-1, which indicates that the physical link of LAN is smooth.

```

C:\>ping 192.168.1.221

Pinging 192.168.1.221 with 32 bytes of data:

Reply from 192.168.1.221: bytes=32 time<10ms TTL=128
Reply from 192.168.1.221: bytes=32 time<10ms TTL=128
Reply from 192.168.1.221: bytes=32 time<10ms TTL=128
Reply from 192.168.1.221: bytes=32 time<10ms TTL=128

Ping statistics for 192.168.1.221:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>

```

Diagram 4-12-1

- **Remote Control Permission Switch:** This is a selectable menu item. User can click the submenu “Accept Remote Device” of the “Monitor” menu. Refer to the following diagram 4-12-2.

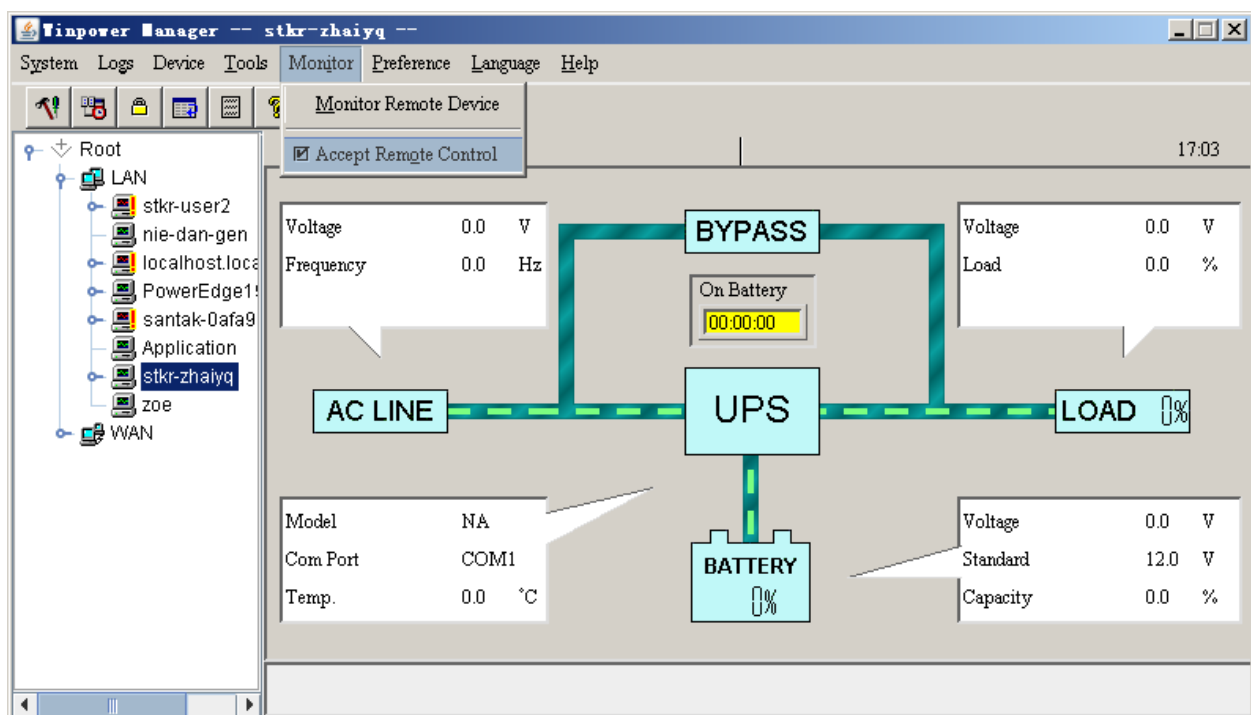


Diagram 4-12-2

- **Startup Monitor:** Refer to the following diagram 4-12-3.

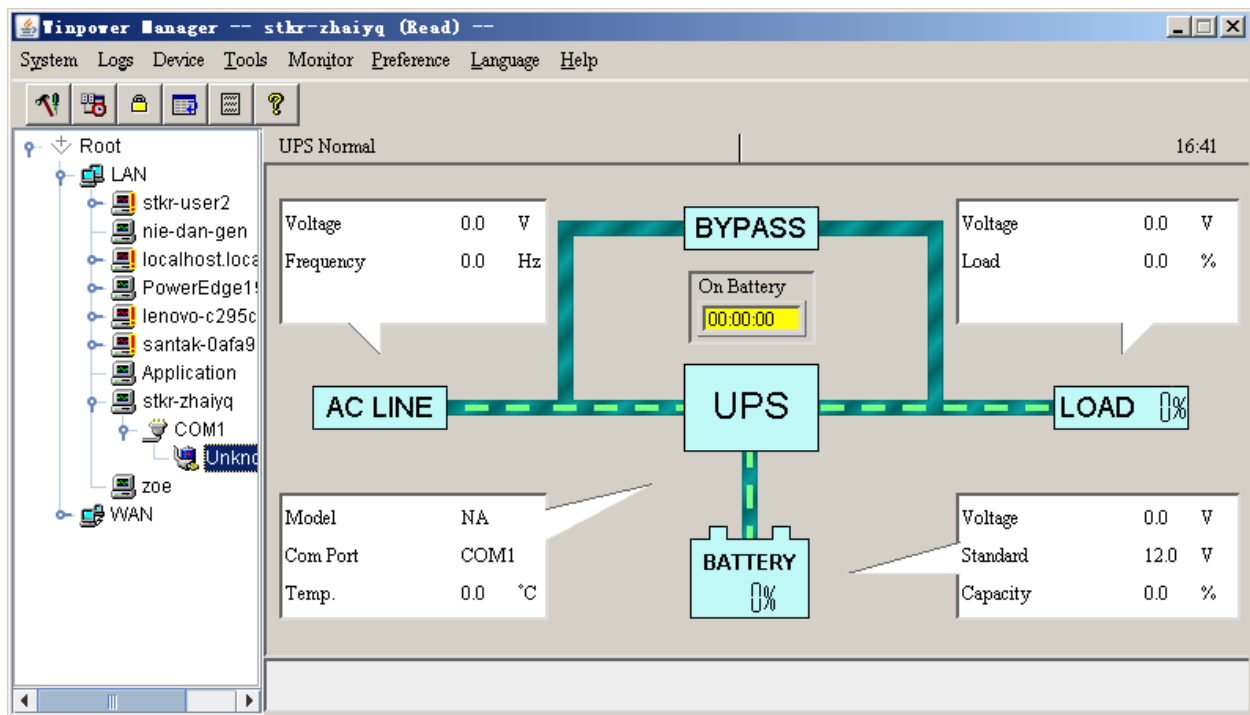


Diagram 4-12-3

➤ Select the Device you want to monitor

You can select the Device from the tree view on the left side of the window.

If the Remote Accept Control Permission Switch of the Agent is not on, you can only monitor but not control. The submenu "Act as Administrator" of the menu "System" is gray and can't be selected. So if you don't log in as an administrator, you can't control all of the operation, Refer to the following diagram 4-12-4.

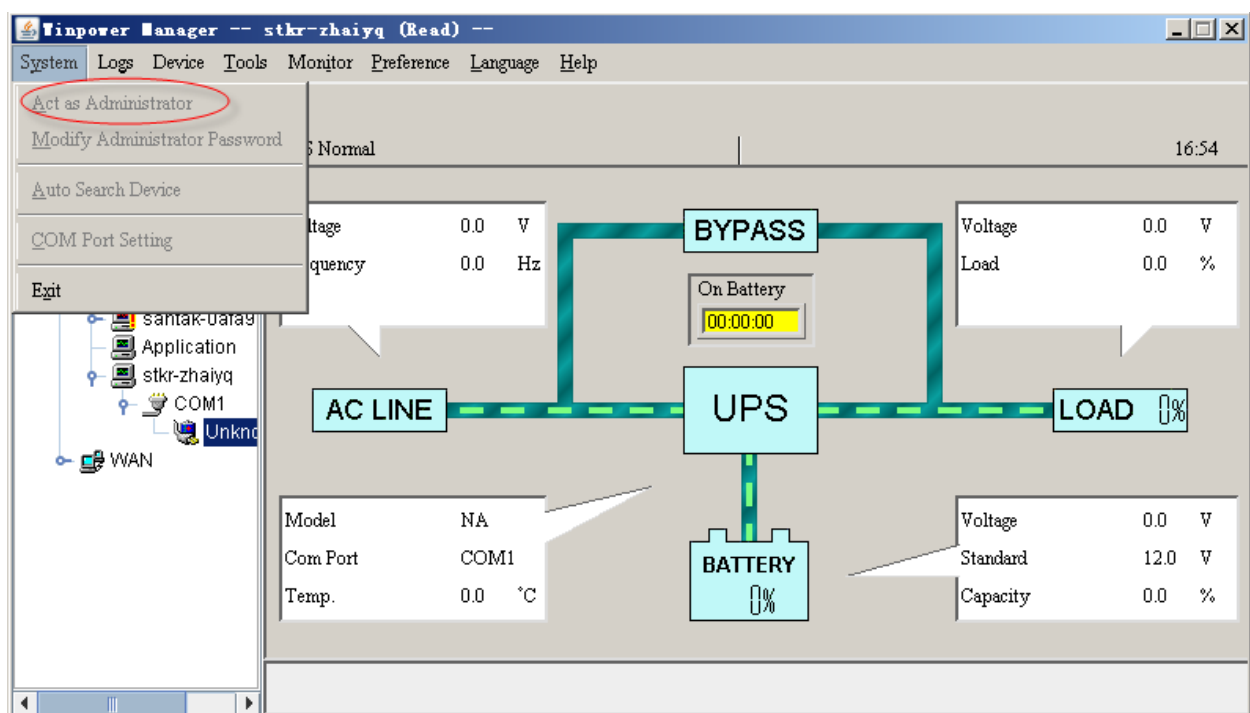


Diagram 4-12-4

If the Remote Control Permission Switch of the Agent is on, you can monitor and control this device. The submenu "Act as Administrator" of the menu "System" is black and can be selected. So

after you log in as an Administrator, you can control all of the operation, Refer to the following diagram 4-12-5.

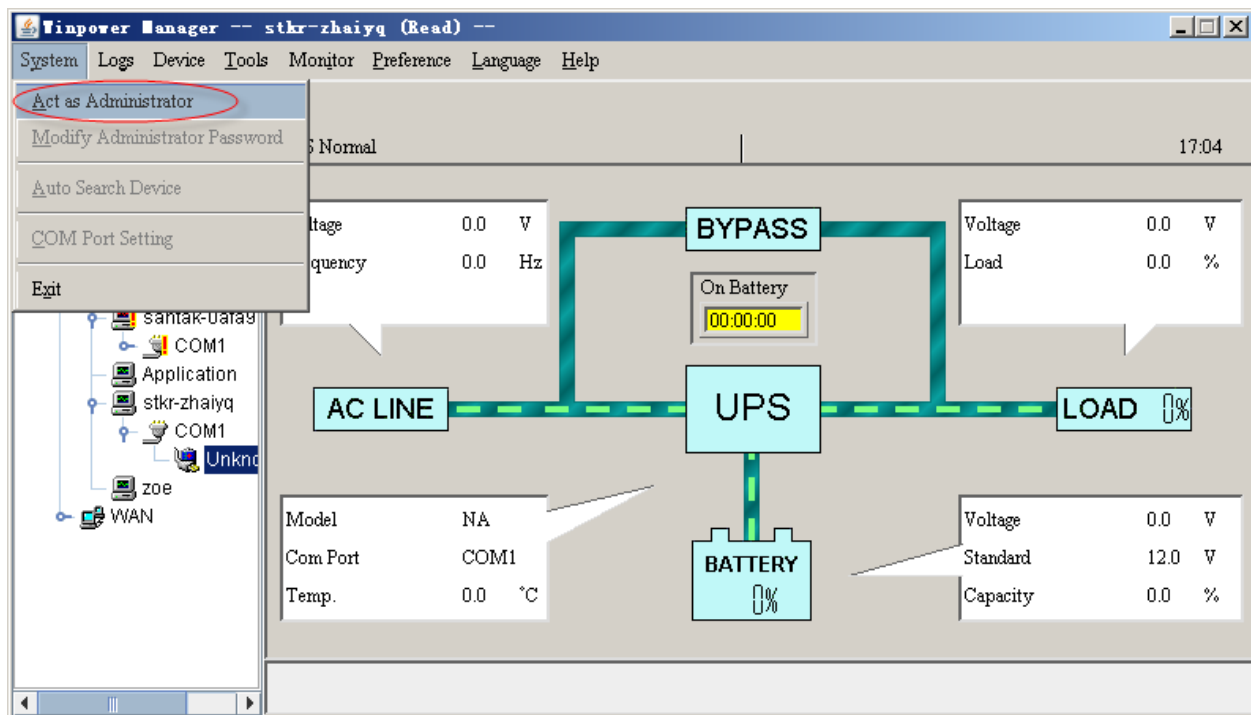


Diagram 4-12-5

13. How to realize remote control of any device in different network in LAN

- ✓ **Precondition**
 - The computers with Winpower must setup TCP/IP protocol in the communication protocol.
- ✓ **Steps for realization**
 - **Keep the communication smooth:** test with network command "PING" under command prompt window. For example, a computer named tj2k with IP address 192.168.2.228, you can test with command "ping 192.168.2.228". Refer to the following Diagram 4-13-1, which indicates that the physical link of LAN is smooth.

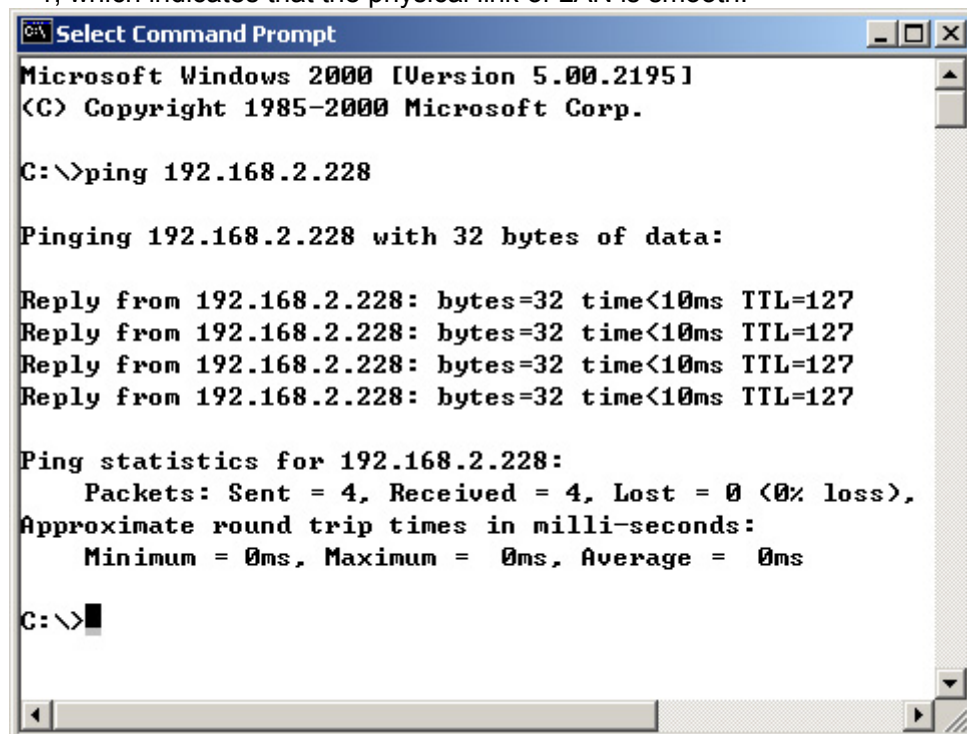


Diagram 4-13-1

➤ **Remote Control Permission Switch:** This is a selectable menu item. User can click the submenu “Accept Remote Device” of the “Monitor” menu.
Refer to the following diagram 4-13-2.

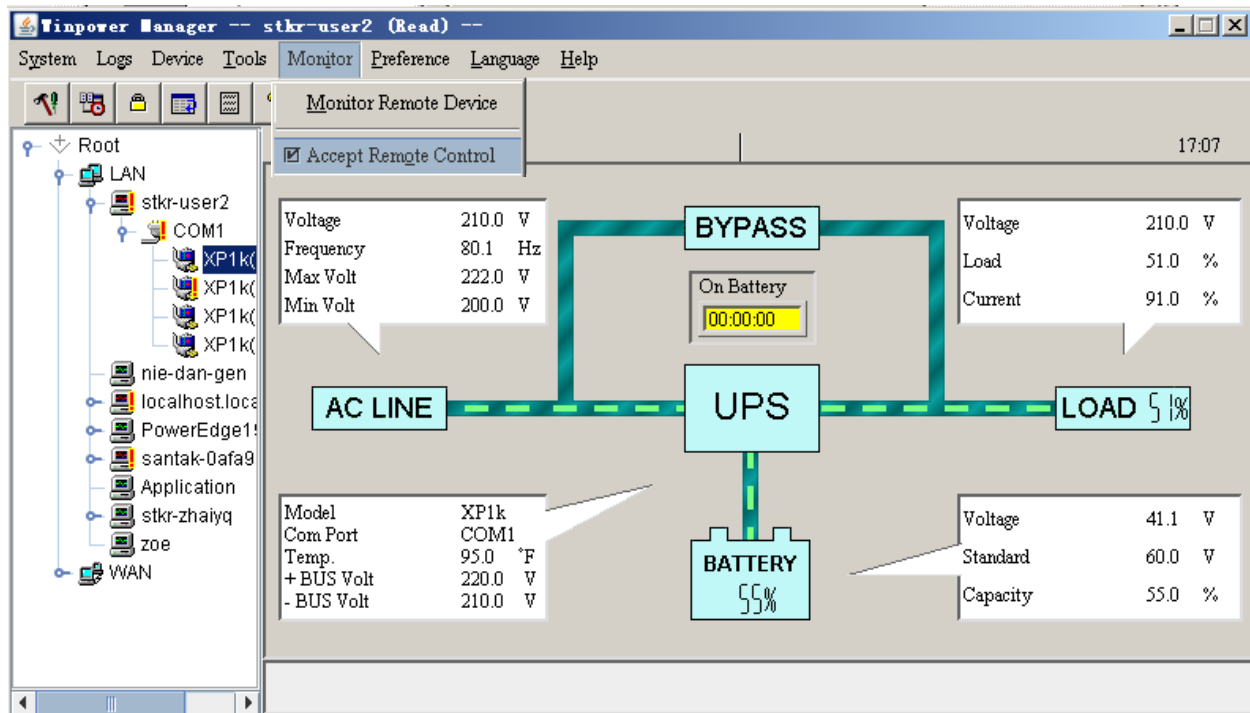


Diagram 4-13-2

➤ **Select the device you want to monitor**

Click the “Monitor Remote Device” item of the “Monitor” menu, and will pop up the “Monitor Remote Device” dialog. Refer to the following diagram 4-13-3.

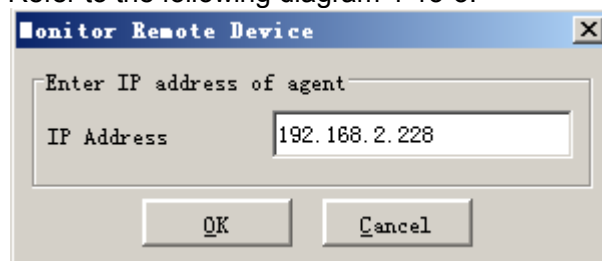


Diagram 4-13-3

User can enter a computer name or IP address in the "Monitor Remote Device" Dialog. Click the “OK” button to finish the setting.

Now you can find the device in the WAN, Refer to the following diagram 4-13-4.

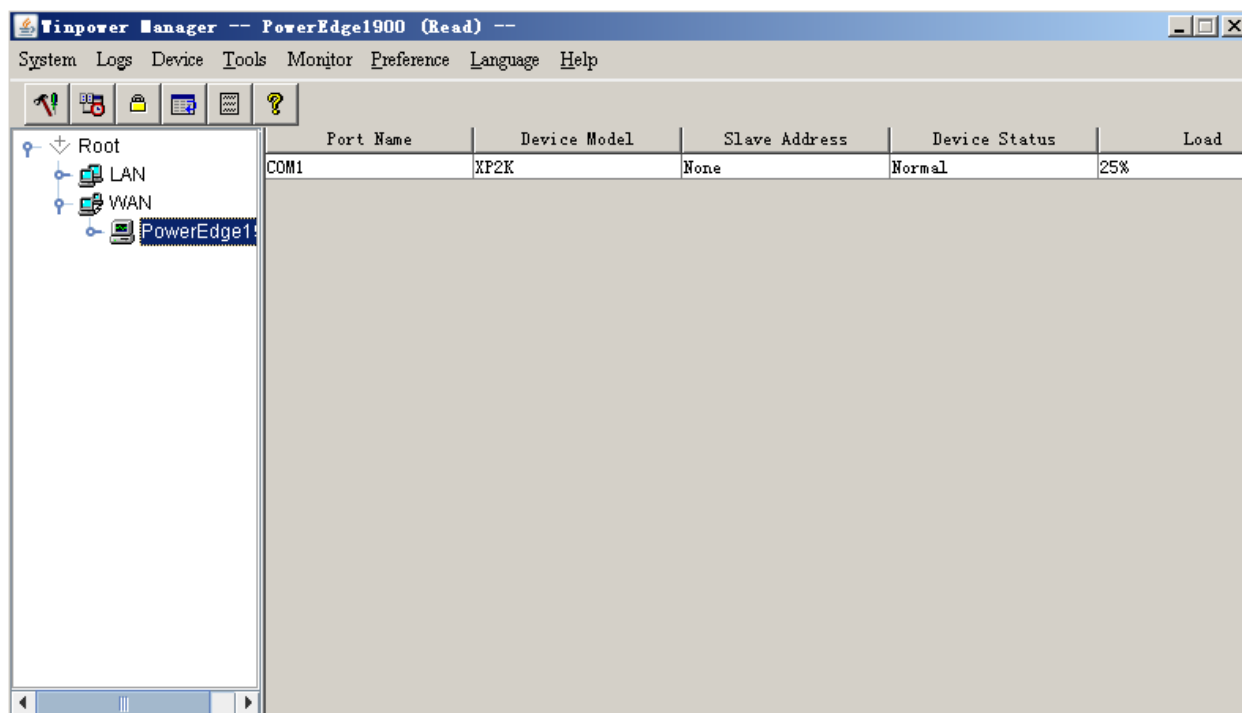


Diagram 4-13-4

If the Remote Control Permission switch of this Agent is not on, then you can only monitor but not control. Refer to the following diagram 4-13-5.

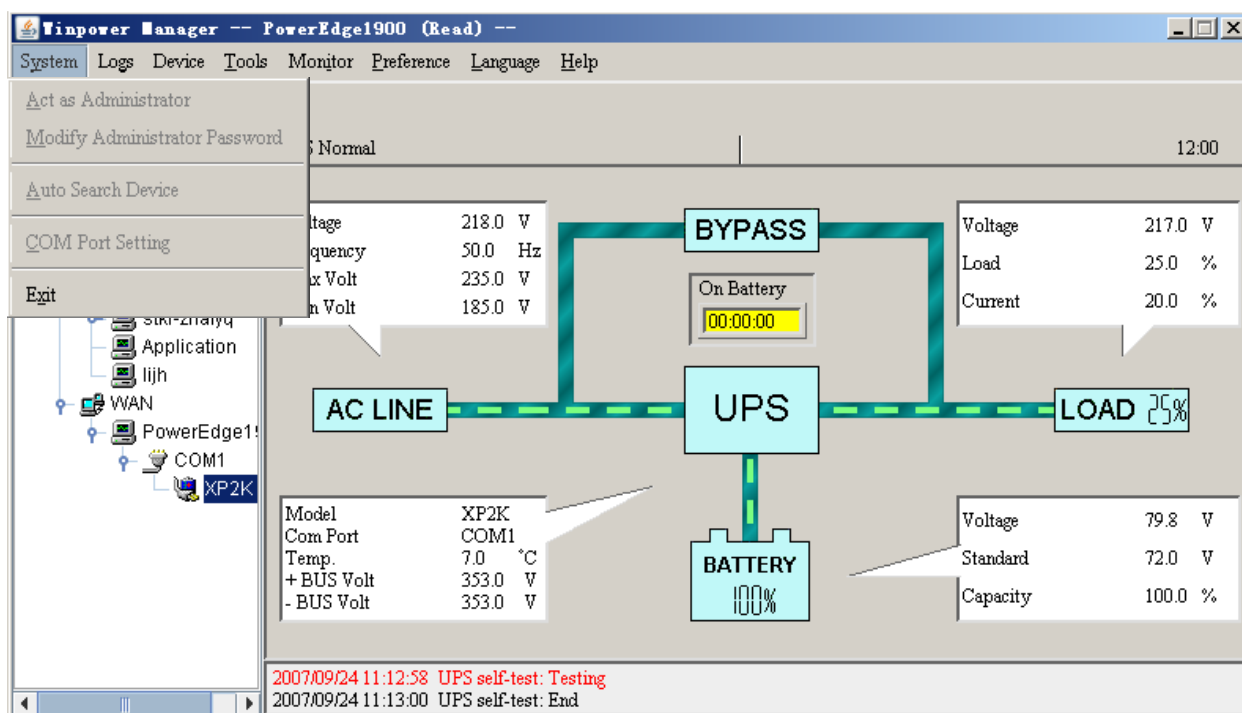


Diagram 4-13-5

If the Remote Control Permission Switch is on, then you can monitor and control this device. So after you login as a super user, you can control all of the operation, Refer to the following diagram 4-13-6.

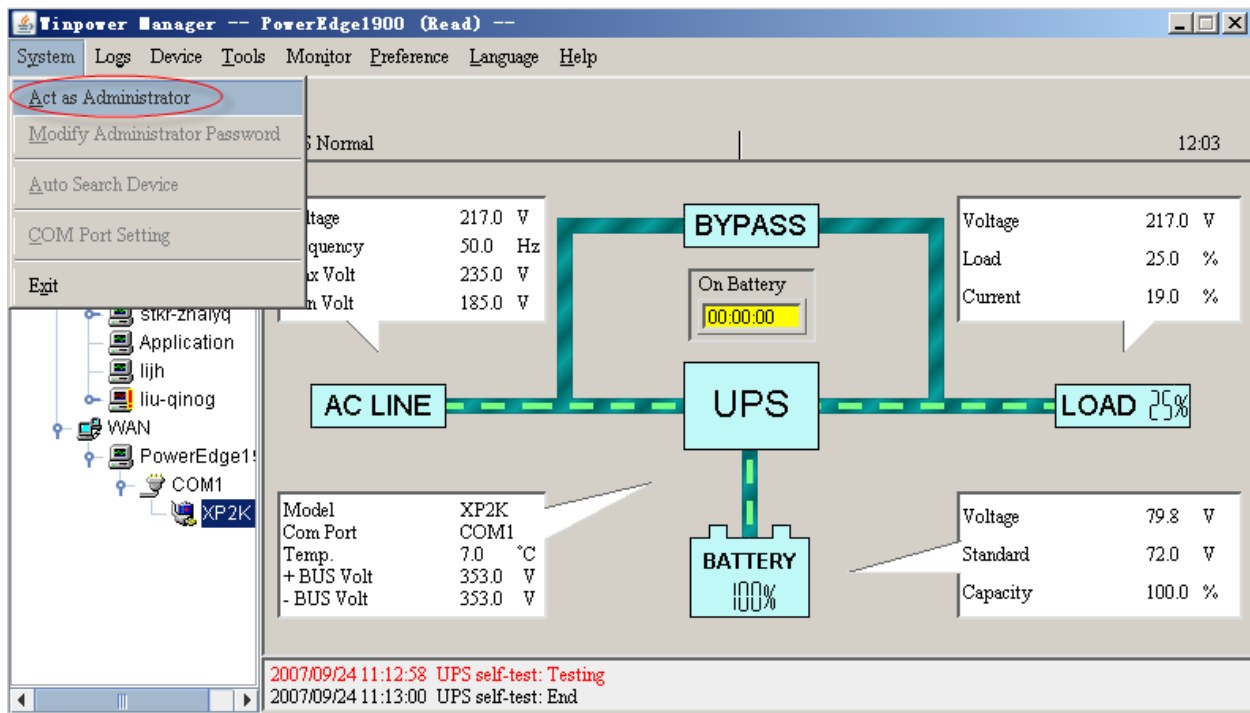


Diagram 4-13-6

14. How to realize the Remote Control of any one of the device in Internet

- ✓ **Precondition**
 - The computers with Winpower must setup TCP/IP protocol in the communication protocol.
 - The computer with Winpower has been connected to the Internet.
- ✓ **Steps for realization**
 - **Keep the communication smooth:** test with network command “PING” under command prompt window. For example, a computer named ssc-test in internet, whose corresponding IP address is 202.103.190.87, and then you can finish the test with command “ping 202.103.190.87”. Refer to the following Diagram 4-14-1, which indicates that the physical link of Internet is smooth.

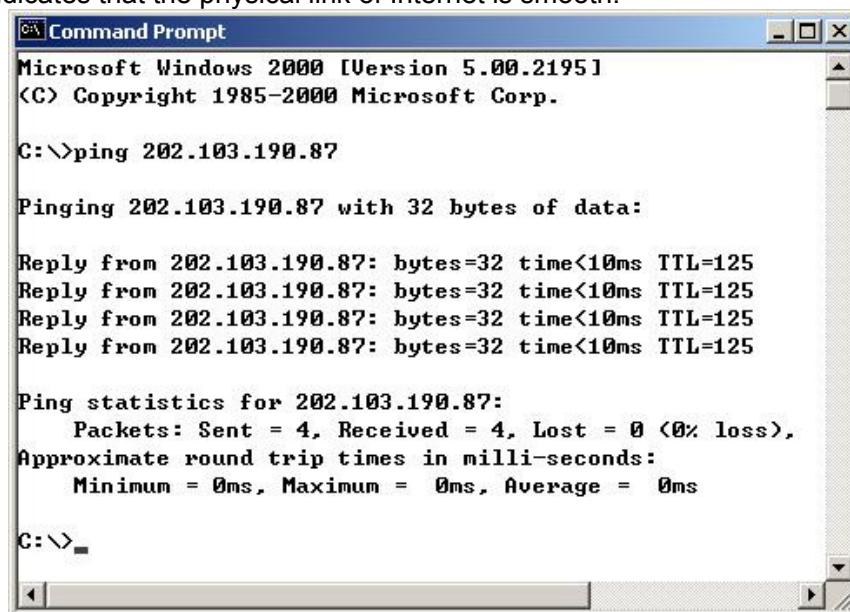


Diagram 4-14-1

- **Remote Control Permission Switch:** This is a selectable menu item. User can open the submenu “Accept Remote Device” of the “Monitor” menu. Refer to the following diagram 4-14-2.

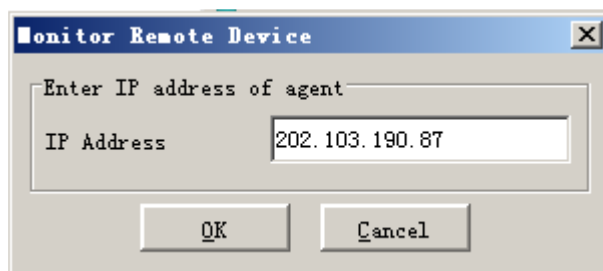


Diagram 4-14-4

User can enter a computer name or IP address in the popped up "Monitor Remote Device" dialog. Click the "OK" button to finish the setting.

Now you can find the device in the WAN, select the device from the tree view on the left side of the window. Refer to the following diagram 4-14-5.

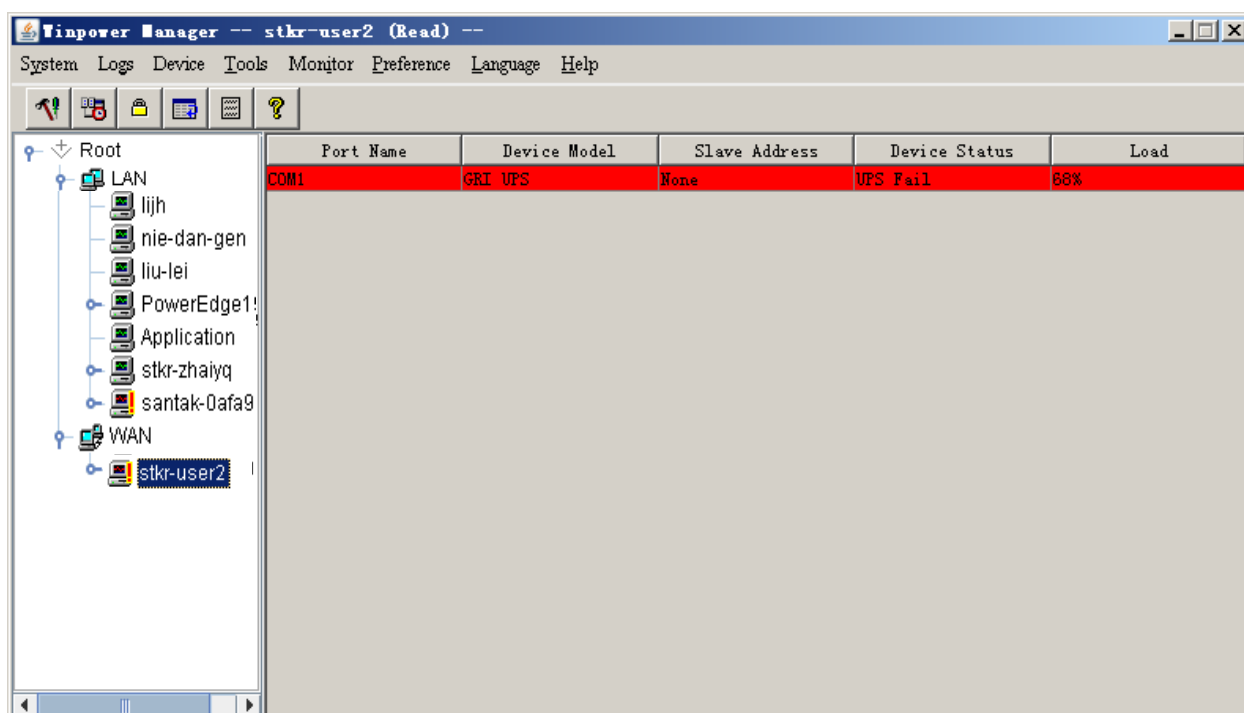


Diagram 4-14-5

If the Remote Control Permission switch of this Agent is not on, then you can only monitor but not control. Refer to the following diagram 4-14-6.

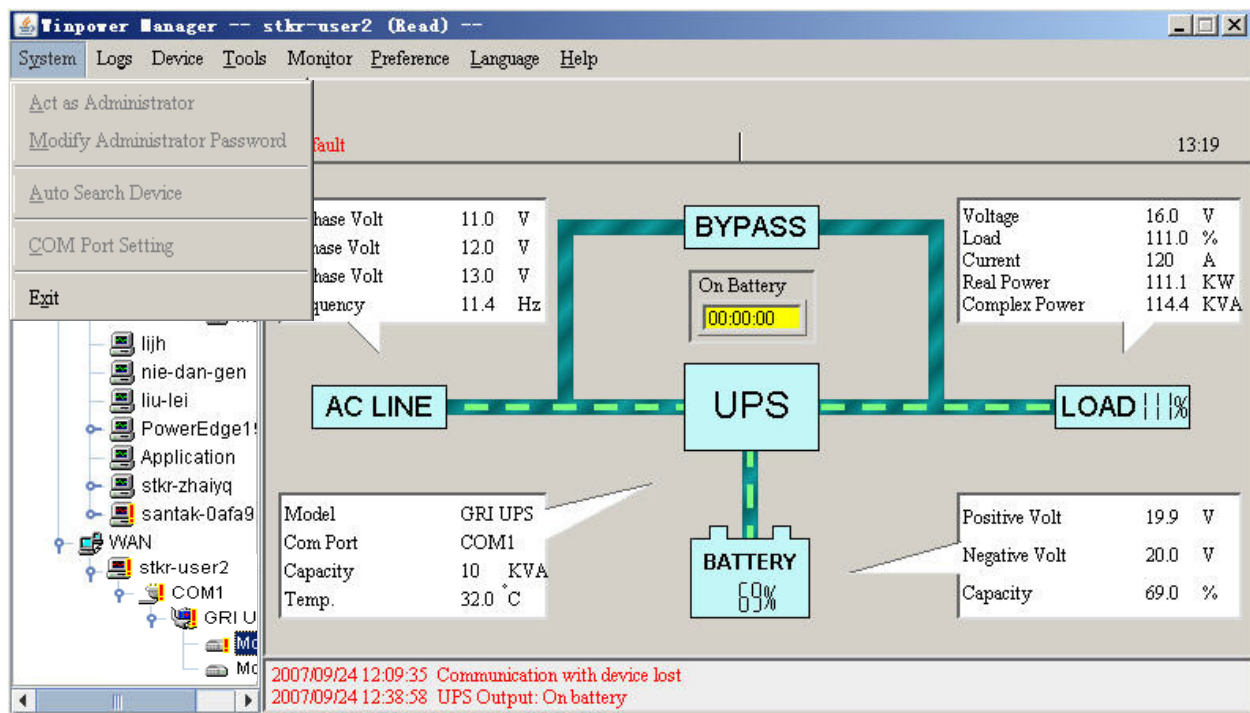


Diagram 4-14-6

If the Remote Control Permission Switch is on, you can monitor and control this device. So after you login in as a super user, you can control all of the operation, Refer to the following diagram 4-14-7.

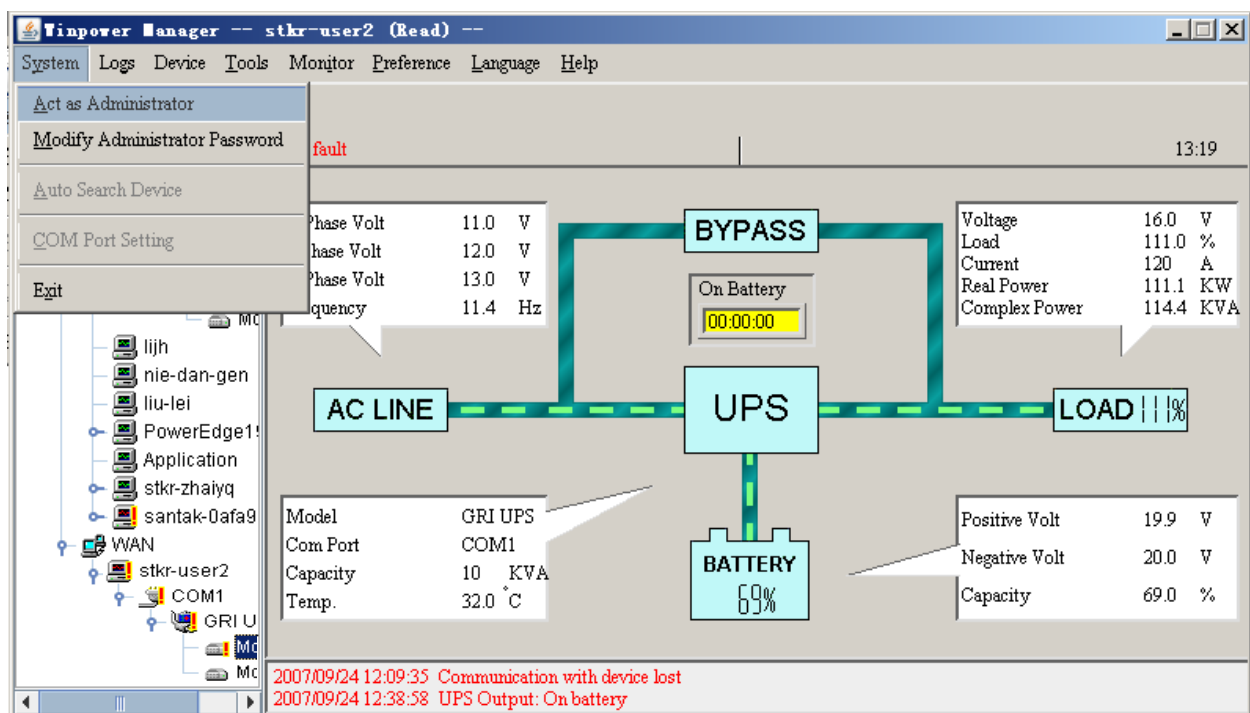


Diagram 4-14-7

Appendix A—Glossary Explanation

Agent—Agent is a background application of the Windows/Unix/Linux operating system.

UPS Battery Low—When Utility Power fails and battery supplies power, if the battery voltage is lower than a certain value (refer to UPS Specification), UPS will send a warning tone at intervals of 1 second for battery low.

UPS battery backup time exhausted—Indicates when UPS AC fails, battery supply time has exceeded the “battery backup time” which has been set (“Battery backup time” can be set in the “Shutdown parameter” dialog of Winpower).

UPS output overload—UPS load is more than 110% Rated load.

Load too high—UPS load is more than 100%~110% rated load.

Supply power in Bypass mode—For the reason of UPS not on or the hardware fault, the input will not go through the inverter of UPS, but output directly. At this moment, if AC fails, UPS will not startup backup battery to supply, so the output will also out of electricity.

UPS self test—After UPS' supply mode is switched from utility power mode to battery mode and work on for a period of time, return to utility power mode again. The purpose of self test: First is to check if it can supply normally in battery mode; second is to make the battery discharge termly (as every month), that is helpful for the battery maintenance and can prolong the battery's service life.

Self test failure—Indicates that the battery can't supply power normally in battery mode via self test .

Battery Backup Time—Indicate the time that battery supplies power when utility power fails. After this time is used up, the Agent begins to shutdown the opened application.

Shutdown File Max Execution Time—The max time which the shutdown file execute.

System Shutdown Need Time—The time for system shutdown, is also the time from system begin shutdown to turn off UPS outlet.

Remote Shutdown by Agent—Local Agent will shutdown in shutdown delay time after the specified Agent Shutdown.

Start Warning before Scheduled Shutdown—If user has set time shutdown, Winpower will begin warning at this time earlier than shutdown.

Shutdown Alarm Interval—Indicate after the shutdown warning begins (include time shutdown warning and AC fail shutdown warning), interval of each warning.

Appendix B---Winpower Event Table

Serial Number	Event Description	Type of Message	Remarks
1	UPS Battery Low	Serious	Can be set as no shutdown system through "Shutdown parameter"
2	UPS Battery Time Exhaust	Serious	Can set battery backup time through "Shutdown parameter"
3	UPS Fail	Serious	
4	UPS Output Overload	Serious	Output load is more than 110%
6	Communication Lost	Warning	The connection of communication cable is not good, or communication port fault.
7	AC Fail	Warning	
8	On Bypass	Warning	UPS will be switched to bypass mode for the reason of overload, hardware fault and so on. Online UPS is also in bypass mode when it is off, at this time UPS has no protection function.
9	Bypass without output		
10	Self-test Fail	Warning	
11	Phase sequence incorrect in Bypass	Warning	Three-phase UPS support
12	Battery switch not engaged	Warning	Three-phase UPS support
13	Load unbalance	Warning	Three-phase UPS support
14	Load too high	Warning	
15	Internal warning	Warning	Three-phase UPS support
16	Maintain cover is open	Warning	
17	AC Restore	Information	.
18	Communication Create	Information	.
19	Agent Start	Information	.
20	Agent Stop	Information	.
21	System be shutdown	Information	.
22	System be Shutdown by Other Agent	Information	Set the Agent need to be in response to through "Shutdown parameter".
23	Special date Close UPS	Information	.
24	Weekly Close UPS	Information	.
25	Self-test Start	Information	Self-test begins immediately.
26	Self-test cancel	Information	.
27	Self-test End	Information	.

28	Special date Self-test Start	Information	.
29	Special date Self-test Cancel	Information	.
30	Special date Self-test End	Information	.
31	Monthly Self-test Start	Information	.
32	Monthly Self-test Cancel	Information	.
33	Monthly Self-test End	Information	.

Frequently Asked Questions

Question:

UPS can not communication with Winpower under Debian Etch Stable Core 2.6 18-5-486

Method to fix it:

Here are the procedures to solve this question:

1. Login in Debian as root, the permission of general user is limited to install winpower. Debian refuse to login as root, some special settings is needed.

Remark

- a. In the login interface, there are three icons: "Language", "Session" and "Action", choose "Action"
 - b. Choose the last icon of "configure the login manager" in the dialog pop-up
 - c. Choose the icon of "security" in the dialog pop-up
 - d. Choose "allow local system administrator login"
2. Input the user name of root and the password, and then install the winpower manually.
Use the command `./agent start` to start Winpower service, and then use the command of `./monitor` to start the monitor interface
 3. Copy the document of s99winpower from Linux (attached CD) to `/etc/rcS.d`,
The file s99winpower is used to start Winpower service automatically.
When the computer reboots, Winpower service will be started automatically. Just need to start the monitor interface by the command `./monitor`

Remark:

- a. If the third step is executed, no matter what the user login in as root or a general user, the communication with UPS will be successful.
- b. If the third step have not been executed, you should login as root, and use the command `./agent start` to start Winpower service. If login in as a general user, the communication with UPS will be failed

Question:

UPS can't communication with Winpower under RedHat Core 2.6 9

Method to fix it:

Add the word of "none /proc/bus/usb usbdevfs defaults 0 0" to the document `/etc/fstab`
Winpower can find the UPS when choose the icon of "auto search".